

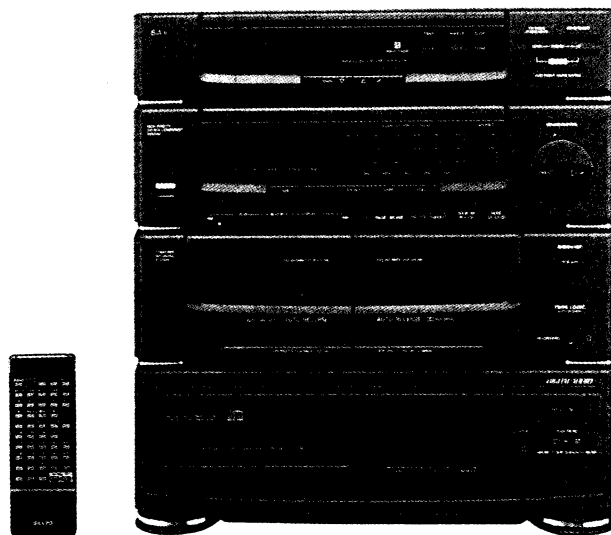
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Service Manual

Compact Disc Hi-Fi Stereo System

DC - X900 (GERMANY)



Specifications

PRODUCT CODE No.
129 353 03

Note :

The below mentioned specifications are mainly based on the IHF measurements standard. They can therefore not directly be compared with specifications based on the DIN standard or other standards.

Tuner		CD player	
Frequency range	FM : 87.5 - 108 MHz MW : 522 - 1,611 kHz LW : 144 - 290 kHz	Channels	2-channel stereo
Amplifier		Sampling frequency	44.1 kHz
Output power	Max. 25W × 2 (at 8 ohms, 10% distortion)	D/A conversion	16-bit linear twin D/A converter
Input sensitivity / impedance	PHONO : 5mV / 47k ohms VIDEO : 280mV / 47k ohms	Pick-up	Optical 3-beam semiconductor laser
		Frequency response	20 - 20,000 Hz
Output impedance	SPEAKERS : 8 ohms HEADPHONES : 8 ohms	Signal to noise ratio	85 dB
		Channel separation	90 dB (1 kHz)
Cassette decks		Distortion	0.12% (1 kHz)
Track system	AC bias, 4-track stereo	Wow and flutter	Undetectable
Frequency response	Chrome tapes : 40 - 15,000 Hz Normal tapes : 40 - 13,000 Hz	General	
Signal to noise ratio	58 dB(with DOLBY NR : ON)	Power requirements	AC : 230V, 50HZ
Wow and flutter	0.12% (WRMS)	Power consumption	90W
Fast forward / rewind time	Approx. 120 sec. (C-60)	Dimensions(approx.)	360 (W) × 328 (H) × 390 (D) mm
		Weight(approx.)	7.2 kg
RB-X900 remote controller			
Power source		DC : 3 V "R6/AA/SUM-3" battery, × 2	
Dimensions(approx.)		63 (W) × 18 (H) × 175 (D) mm	
Weight(approx.)		90 g without batteries	

Note :

The POWER switch is mounted on the secondary side. The unit is not disconnected from AC-power, even when switched off.

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

Specification subject to change without notice.

REFERENCE No. WM-580618

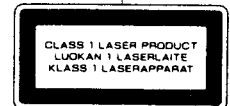
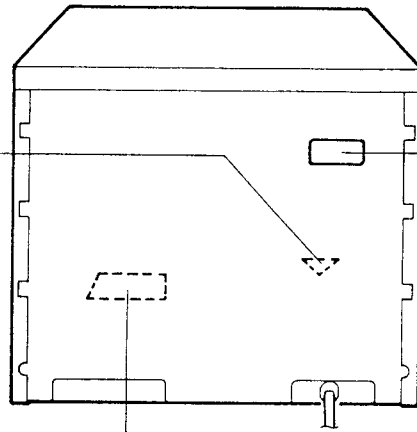
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LASER BEAM SAFETY PRECAUTIONS

Do not look directly at the laser beam coming from the pick-up or allow it to strike against your fingers, skin, etc.
Do not apply power if there is a broken part in the laser output section of the pick-up.

Structural Safety Interlock

This model has a disc chuck lever and top lid. This disc chuck lever and top lid prevent to expose the laser beam for users.



CAUTION -- INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED. AVOID EXPOSURE TO BEAM.
ADVARSEL -- USYNLIG LASER STRÅLING VED ÅBNING. NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION, UNDGÅ UDSÆTTELSE FOR STRÅLING.
VARNING -- OSYNLIG LASER STRÅLNING NÅR DENNA DEL ÄR ÖPPNAD OCH SPÄRR ÄR URKOPPLAD. STRÅLEN ÄR FARLIG.
VORSICHT -- UNSICHTBARE LASERSTRAHLUNG TRITT AUS. WENN DECKEL GEÖFFNET UND WENN SICHERHEITSVERRIEGELUNG ÜBERBRÜCKT IST, NICHT, DEM STRAHL AUSSETZEN.
VORO -- AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTHINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.

INVISIBLE LASER RADIATION EXPOSURE TO BEAM IS DANGEROUS CLASS 1 LASER PRODUCT

OUTPUT POWER : 0.6 mW MAX

WAVELENGTH : 790 nm

HANDLING THE PICK-UP

1. Shipping and storage cautions

- The pick-up must be stored in a conductive bag until immediately prior to its use.
- Do not drop it or subject it to impacts.

2. Repair cautions

- When handling the pick-up, be careful not to give it undue force or shock by your hands. Otherwise the pick-up may malfunction or the PCB may be cracked.
- The pick-up which has been minutely adjusted before shipment as one part. Never touch and move the adjusting points and setscrews of the pick-up unless otherwise described in the item of adjustment to avoid damage.

- A strong magnet is used in the pick-up.

Do not bring a magnet or other magnetized object near to it.

3. Cleaning the lens

- * If dust gets on the lens, clean it away by using an air brush such as used for a camera lens.
- * The lens is held in place by a spring.
If the center of the lens is dirty, carefully clean it using cotton swab moistened with isopropylalcohol. Since special coating is made on the surface of the lens which is made of plastics, do not use other kind of alcohol and cleaning fluid to prevent damage to the lens. Also, be careful not to bend the lens spring when cleaning.

BEFORE REPAIRING THE CD PLAYER

1. Preparations

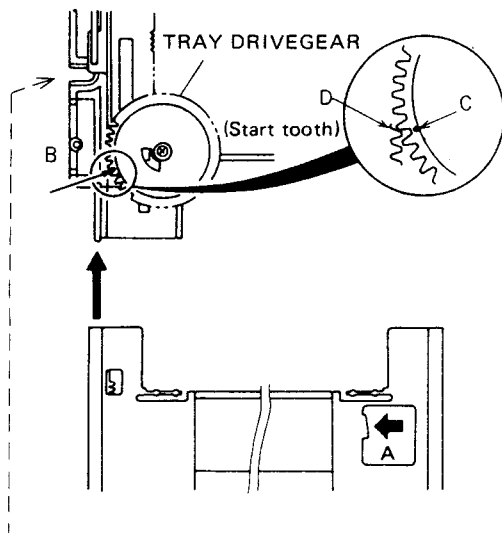
- Many ICs, LSI and the Pick-up (laser diode) are used in the compact disc player. These components are sensitive to static electricity, and might be damaged by static electricity or high voltage, so particular care should be taken regarding this point.
- Many precision components and the lens are used in the pick-up.
Never attempt to make repairs, or to store parts, where the temperature or humidity is high, where magnetism is strong, or where there is much dust.

2. Notes regarding repairs

- Be sure to first disconnect the power plug before attempting to replace any component.
- All tools, instruments, etc., used for measuring must be grounded.
Grounding can be accomplished by using conductive metal sheet on the work bench.
- To prevent AV leakage of the soldering iron, ground its metal part.
- Repair personnel must be grounded.

DISASSEMBLY (CD MECHANISM)

1. Removal of DISC TRAY



- Drive the mechanism to open end. OPEN / CLOSE Switch : Push ON
- Pull the TRAY off the mechanism. (Push the A rib of the TRAY to the direction of arrow and free from chassis rib.)
- Turn the PICK-UP drive gear (under chucking lever) slowly manual forward clockwise and move the slide to the front end.
- Match the guide groove of TRAY to the chassis guide and insert to the direction of arrow.
- Insert the TRAY to the mechanism after to match the C (tooth bottom) to the D (starting tooth) of TRAY rack. Then complete the close motion by OPEN / CLOSE Switch : Push ON.

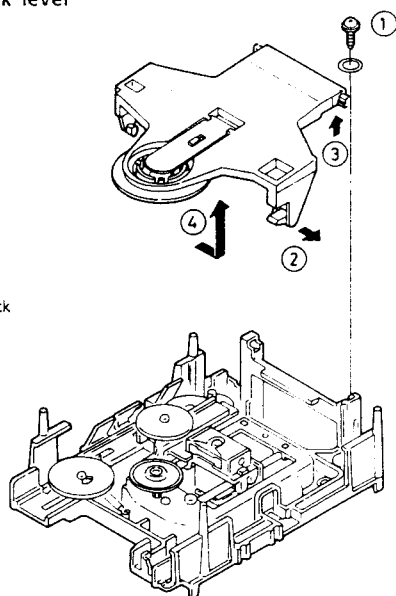
Note : Never turn the TRAY drive gear by hand directly in the all mechanism adjustment so that you will wound the teeth of the TRAY drive gear.

(If the left slide obstructs the special screw, turn the PICK-UP drive gear a little.)

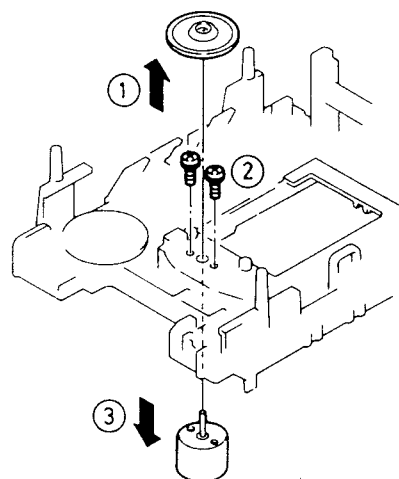
2. Removal of CD Mechanism

a. Removal of the chuck lever

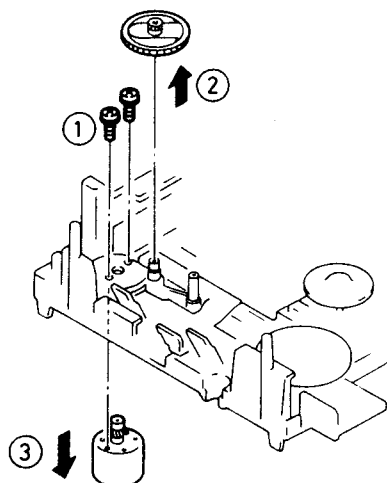
Pull the flange ② of the chuck lever to the outer side.



c. Removal of the spindle motor



b. Removal of the sled motor

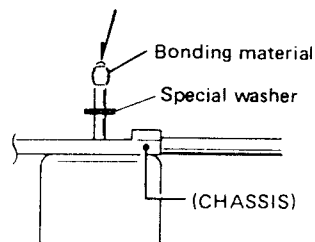


- First, prepare the new turn-table and new special washer for replacement. And prepare dial-type calipers. The removed turn-table will be deformed by the heat of the soldering iron, and cannot be reused.
- a. The attached bonding material can be dissolved by using a 60W soldering iron to heat the shaft at the lower part of the turn-table for about one minute.
- b. The turn-table can then be removed from the shaft by very carefully applying force upward at the center of the lower surface of the turn-table.
- c. Remove the two screw and remove the spindle motor.
- d. Attach the special washer to the spindle motor.
- e. Apply a small amount of a mixture(50 : 50) of the "Three Bond 2001" and "2105F" bonding materials to the motor's shaft.

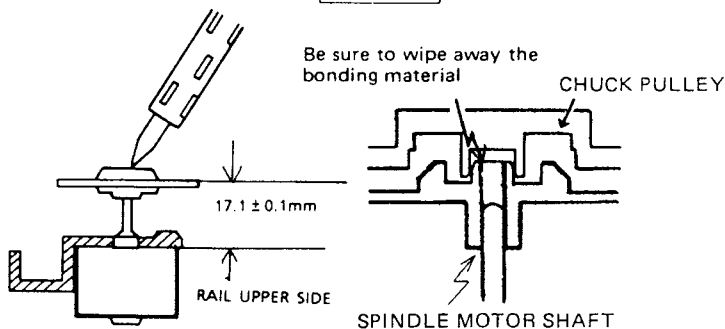
DISASSEMBLY (CD MECHANISM)

- f. Install the turn-table as shown in the figure.
- g. Secure the turn-table by pressing gently. Be sure to wipe away (by using a piece of cloth, or similar material) any bonding material coming out of the hole.

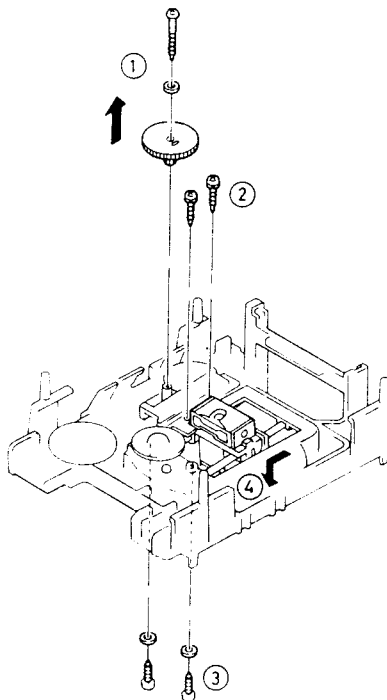
Don't attached bonding material at the top of shaft



Be sure to wipe away the bonding material

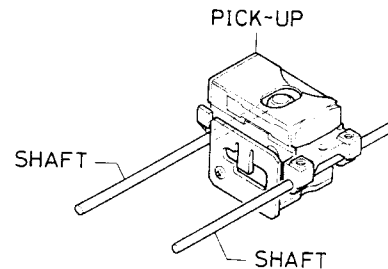


d. Removal of the Pick-up



e. Replacement and lubrication of the Pick-up

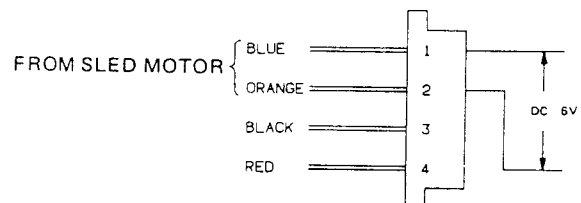
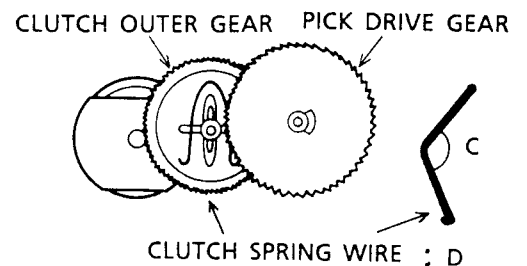
- a. Before replacement of the pick-up, be sure to carefully read the section regarding the pick-up when the unit is moved or transported.
- b. Remove the two pick-up rails with care fixing the 2 latches with any way driver from bottom of chassis.
- c. When replacing the pick-up, carefully wipe away the grease from the shafts on which the pick-up is mounted.
- d. Replace the pick-up.
- e. Move the pick-up to the position at the left side, and then apply a coating of floil (G-474B) to the shafts.
- f. Move the pick-up to the right side and apply floil to the remaining of the shafts.



f. Inspection of slip current

Stop the TRAY on opening by force, check the slip mechanism (next gear assembly of motor)

- a. Confirm that the inner gear stops and outer gear and motor's gear rotate.
- b. Confirm that the scale of control meter is 225mA ~ 275mA.
- c. Check this slip inspection on DC 6.0V.



- * In the case of that DC current scale don't display 225mA~275mA, adjust to below items.
 read current value : A · amount of the grease (Silicon G333) : B
 bender angle of the spring wire D : C
 A > 275mA → increase the angle C or decrease B.
 A < 225mA → decrease the angle C or increase B.

CD ADJUSTMENT

Electrical Adjustment

So far we have presented explanations regarding compact disc player handling, notes prior to repair, handling the pick-up and disassembly of the unit. Be sure to carefully read these instructions before making any adjustments.

Preparations for Adjustments

Measuring instruments, tools and filter

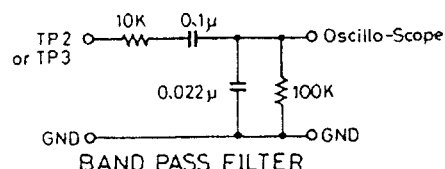
- (1) Test disc.: YEDS 18 (Sony)
- (2) Oscilloscope : SS5711 (10MHz or dual phenomenon)
or Memoryscope : DSS6521 (Storagescope)
- (3) Digital voltmeter (Input impedance 1M ohm or more)

- (4) Oscillator (400Hz, 300mV RMS)
- (5) Frequency Counter (5MHz; or more)
- (6) Screw drivers (non-metallic) for adjustments
- (7) Band Pass Filter
- (8) AC Voltage Meter

Notes: a. The adjustments can be using the equipment produced by other manufactures provided that the performance of that equipment corresponds to that of the above listed models.

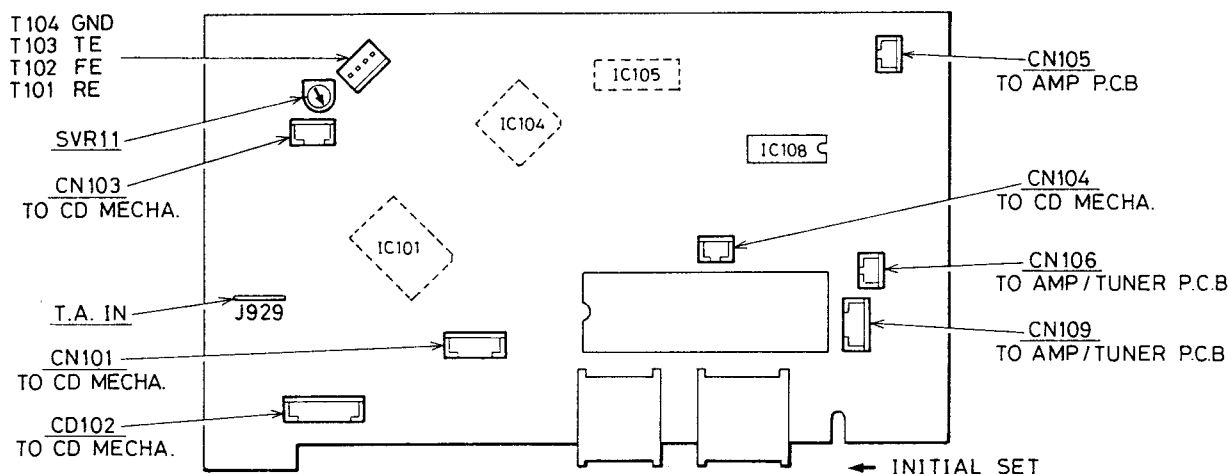
b. Use a 10 : 1 probe for observing signals on the oscilloscope and storage scope.

c. Test disc is subject change without notice.



1. Initial set

Set the SVR11 at its initial position of adjustment controls as shown in figure below.

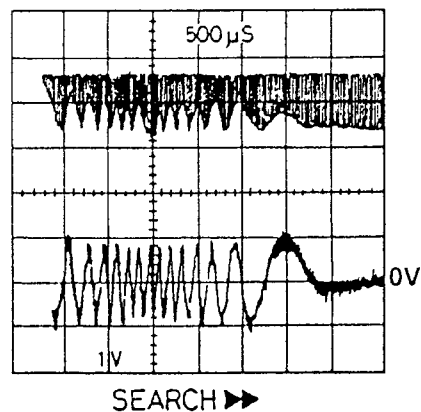
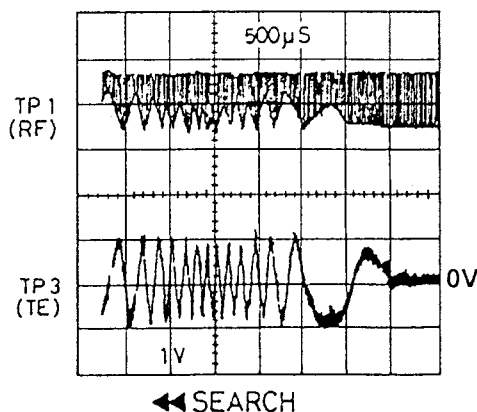


2. Tracking Balance Adjustment (SVR11)

1. Connect the oscilloscope to TP3 (TE) and TP4 (GND.).
2. Turn on the power of the unit. Insert test disc.
3. Play-back the test disc.
4. Continuously press the forward search >> or << button to do it

5. Adjust SVR11 so that the TE (Tracking Error) signal waveform of TP3 on the oscilloscope is vertically symmetrical relative to 0V. (See figure right side)

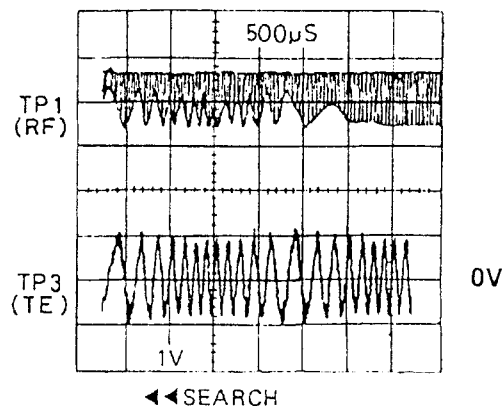
*If the adjustment is imperfect, become run away the sled motor (pick-up sending motor), inferior playability.



CD ADJUSTMENT

2. Other Adjustment of Tracking Balance (SVR11)

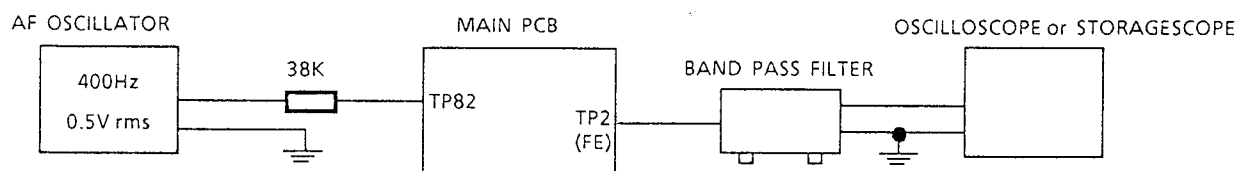
1. Short J929 (A.T.IN) and TP4 (GND) or connect TP23 (T.OFF) to +5V through the resistor : 10k ohms.
2. Connect the oscilloscope to TP3 (TE) and TP4 (GND.).
3. Turn on the power of the unit.
4. Adjust SVR11 so that the TE (Traverse) signal waveform of TP3 during about 12 sec. on the oscilloscope is vertically symmetrical relative to 0V. Or may adjust SVR11 so that the DC voltage : (Peak Hold Level) - (Bottom Hold Level) of the traverse signal is 0V. (See figure right side)
5. If this adjustment is not complete during 12 sec. reperform item 2 ~ 4.



3. Focus Gain Confirmation

1. Connect the storage scope to TP2 (F.E : Focus Error) through the Band pass filter. (See BPF Figure)
2. Turn on the power of the unit.
3. Play-back the test disc.
4. Set the output of AF oscillator to 400Hz, 0.5V rms and connect to TP82 through the resistor : 38k ohms.
5. Confirm so that the voltage of the F.E signal waveform on the storage scope is 0.5V p-p, $\pm 3\text{db}$ by through BPF.

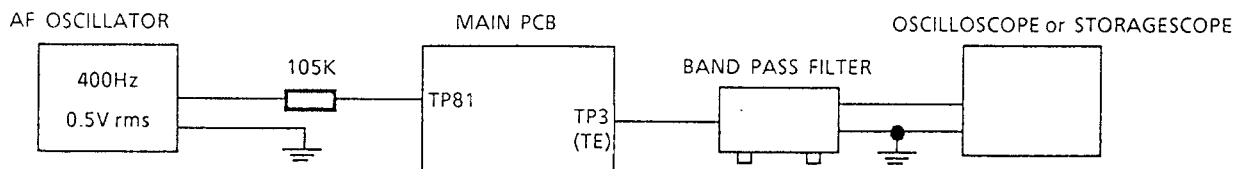
*If this CONFIRMATION is imperfect, become weak the mechanical shock, inferior playability, and can not playback the Disc.



4. Tracking Gain Confirmation

1. Connect the storage scope to TP3 (T.E) through the Band pass filter. (See BPF Figure).
2. Turn on the power of the unit.
3. playback the test disc.
4. Set the output of AF oscillator to 400Hz, 0.5V rms and connect to TP81 through resistor 105k ohms.
5. Confirm so that the voltage of T.E signal waveform on the storage scope is 0.5V p-p, $\pm 3\text{db}$ by through BPF.

*If this CONFIRMATION is imperfect, become weak the mechanical shock, inferior playability, and can not playback the Disc.



TUNER ADJUSTMENT

- Use a plastic screwdriver for adjustment.
- Adjust the intermediate frequency of AM and FM to the frequency of ceramic filter.

RF Level : 75 ohm Open SG voltage $\text{dB}\mu\text{V}$

1. FM BAND

Antenna : 75 ohm Unblanced Direct Modulation : 1kHz, $\pm 75\text{kHz}$ dev.

STEP	ITEMS		FREQUENCY INDICATED POSITION	INPUT CONDITIONS		OUTPUT CONDITIONS		ADJUST-ING PARTS	STANDARDS
				MEASURING INSTRUCTIONS	CONNECT-IONS	MEASURING INSTRUCTIONS	CONNECT-IONS		
1	IF (V-Curve)		98.0 MHz	FM Sweep Generator (10.7MHz Non Modulation Small Input)	TP213(H) TP212(E)	FM Sweep Generator	TP223(H) TP224(E)	T2201	Symmetrical Wave Max.
2	Tuning Cover	Low	87.5 MHz	---	---	Digital Voltmeter	TP202(H)	L2104	$1.2 \pm 0.05\text{V}$
		High	108.0 MHz				TP201(E)	---	Confirm voltage is below 8.5V
3	Tracking	Low	90.0 MHz	FM-SG	TP211(H) TP212(E)	VTVM Oscilloscope	①TP233(H) ②TP234(H)	L2102 L2103	Max.
		High	106.0 MHz				TP235(E)	CT201	
4	IF S-Curve (0V)		98.0 MHz	FM-SG(66dB)	TP211(H) TP212(E)	Digital Voltmeter	TP203(H) TP204(E)	T2202	$0 \pm 0.05\text{V}$
5	* VCO (19 kHz)		98.0 MHz	FM-SG(66dB) (Non Modulation)	TP211(H) TP212(E)	Frequency Counter	TP206(H) TP207(E)	SVR23	$19 \pm 0.05\text{kHz}$

Standard input Modulation for Separation : Main(L+R) : $\pm 40\text{kHz}$ dev. Pilot : $\pm 6.75\text{kHz}$ dev.

Note : TP204 is no earth point. Be careful so that digital voltmeter earth (including case) may not be in contact with other measuring equipments earth. (including case)

RF Level : Open SG voltage $\text{dB}\mu\text{V}$

2. MW BAND

Antenna : IRE Loop, Standard output : 100dB, Modulation : 1kHz 30%

STEP	ITEMS		FREQUENCY INDICATED POSITION	INPUT CONDITIONS		OUTPUT CONDITIONS		ADJUST-ING PARTS	STANDARDS
				MEASURING INSTRUCTIONS	CONNECT-IONS	MEASURING INSTRUCTIONS	CONNECT-IONS		
1	Tuning Cover	Low	522 kHz	---	---	Digital Voltmeter	TP202(H)	L2153	$1.2 \pm 0.03\text{V}$
		High	1611 kHz				TP201(E)	---	Confirm voltage is below 8.0V
2	Tracking	Low	603 kHz	AM-SG	IRE Loop Ant.	VTVM Oscilloscope	①TP233(H) ②TP234(H)	L2152	Max.
		High	1404 kHz				TP235(E)	CT252	

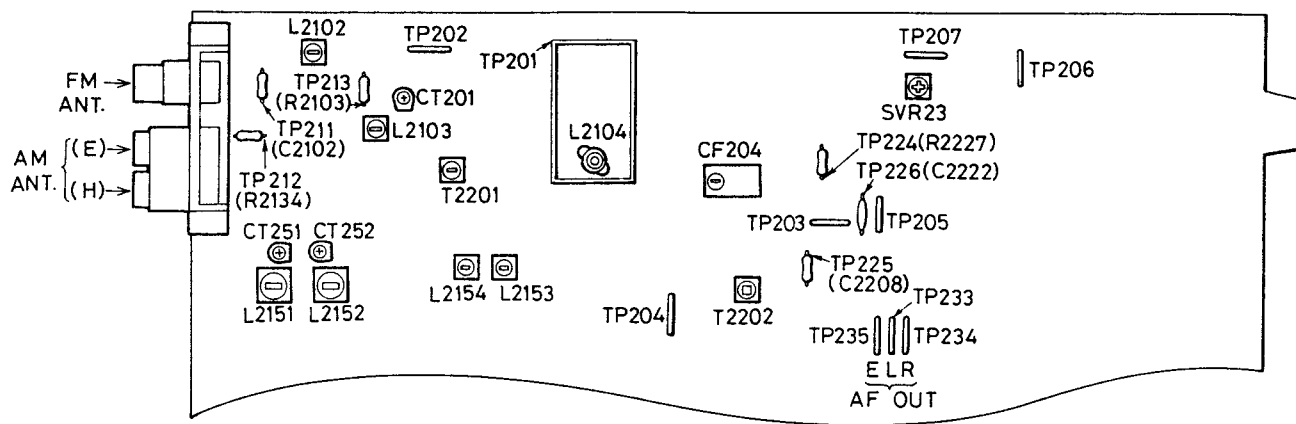
3. LW BAND

Antenna : IRE Loop, Standard modulation : 400Hz 30%

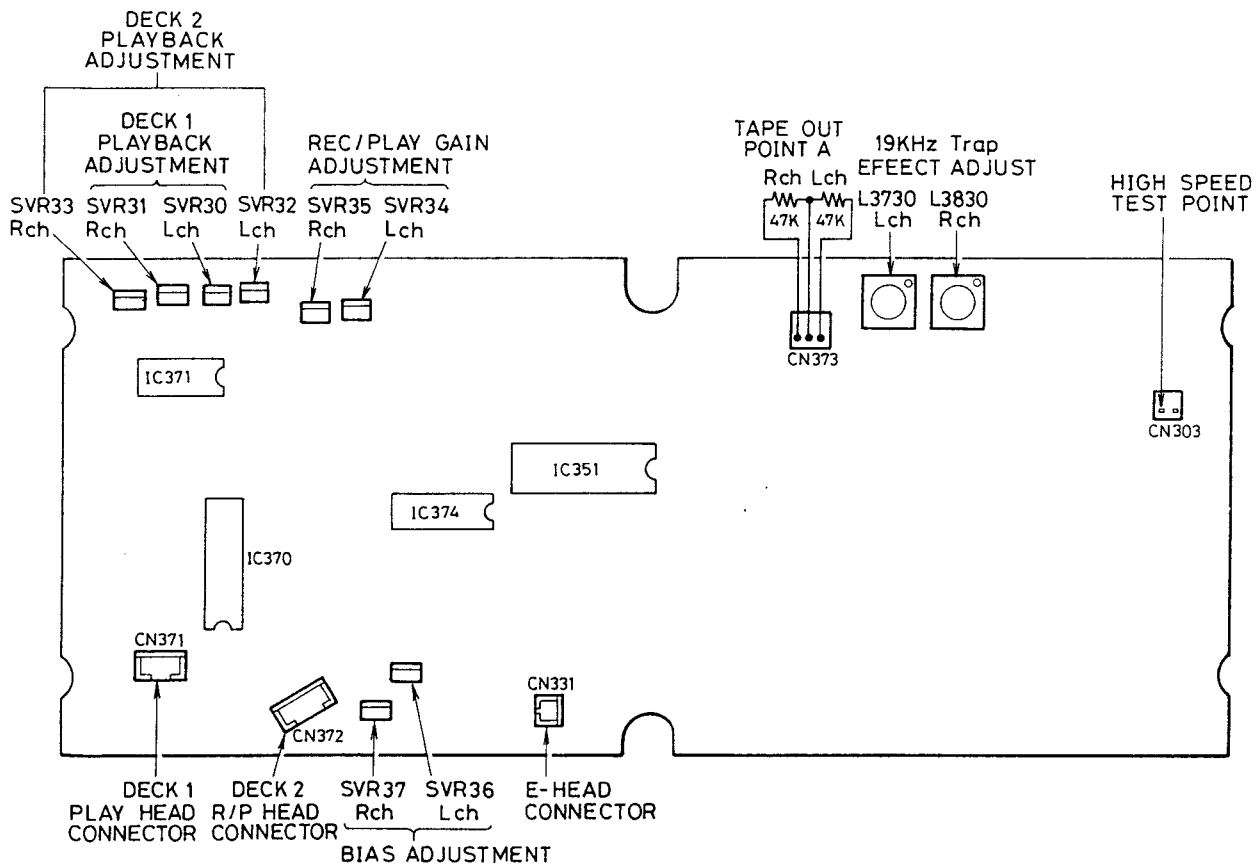
STEP	ITEMS		FREQUENCY INDICATED POSITION	INPUT CONDITIONS		OUTPUT CONDITIONS		ADJUST-ING PARTS	STANDARDS
				MEASURING INSTRUCTIONS	CONNECT-IONS	MEASURING INSTRUCTIONS	CONNECT-IONS		
1	Tuning Cover	Low	144 kHz	---	---	Digital Voltmeter	TP202(H)	L2154	$1.6 \pm 0.05\text{V}$
		High	290 kHz				TP201(E)	---	Confirm voltage is below 7.5V
2	Tracking	Low	162 kHz	AM-SG(85dB)	IRE Loop Ant.	VTVM Oscilloscope	①TP233(H) ②TP234(H)	L2151	Max.
		High	279 kHz				TP235(E)	CT251	

PARTS LOCATIONS

<TUNER>



<DECK>



ADJUSTMENT OF DECK & TORQUE

1. Amplifier Adjustment

TAPE SW : NORMAL

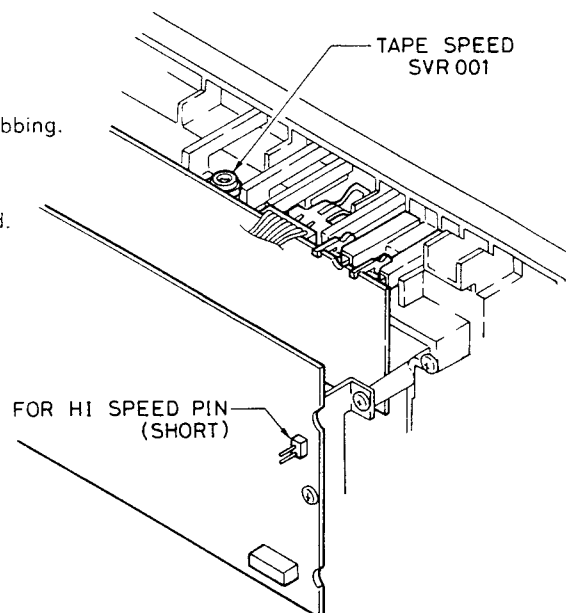
	ITEM	DECK	TEST TAPE	INPUT	DOLBY SW	OUTPUT	ADJUST POINT	REMARKS
1	Head Azimuth	DECK 1 DECK 2	VTT738	-	OFF	TAPE OUT	Azimuth Screw	Adjust so as 10kHz output become maximum.
2	Playback Level	DECK 1 DECK 2	TCC130	-	OFF	TAPE OUT	SVR30 (L-ch) SVR31 (R-ch) SVR32 (L-ch) SVR33 (R-ch)	Adjust so as TAPE OUT output become 0.54V.
3	Rec/Play Level	DECK 2	AC224	1kHz -18dB	OFF	TAPE OUT	SVR34 (L-ch) SVR35 (R-ch)	Adjust SVR so as Monitor o/p = R/P Level = 0dB \pm 1dB.
4	Rec/Play Frequency	DECK 2	AC224	1kHz/10kHz -28dB	OFF	TAPE OUT	SVR36 (L-ch) SVR37 (R-ch)	R/P signal, set frequency characteristic 1kHz output to 0dB. Adjust SVR so as 10kHz output become \pm 1dB.

Note. 1. During alignment, measurement Beat cancel SW is at 1 condition fundamentally, confirm Rec/Play frequency characteristic, dolby effect also by 2 condition, when ship out set SW to 1 position.

2. Tape Speed Adjustment

Connect the FREQUENCY COUNTER to TAPE OUT.

1. Insert the test tape(MTT-111N, etc. : 3000Hz) into the DECK 1. Note : Set the test tape near the tape end.
2. Press the FWD PLAY button.
3. Adjust SVR001 so that a frequency counter reading of 3000 ± 5 Hz is obtained.
4. Press the STOP button, and eject the test tape.
5. Insert the test tape(TCW-211, etc. : 1500Hz) into the DECK 1.
6. Insert the tape (C-60 Blank tape) into the DECK 2.
7. Press the REC button of DECK 2 and press the TAPE A/B button.
Press the FWD PLAY button. Both mechanism become normal speed dubbing.
8. Short the high speed test pin to the high speed position.
(The mechanism is high speed dubbing.)
9. Confirm that a frequency counter reading of 2700 ~ 3300Hz is obtained.

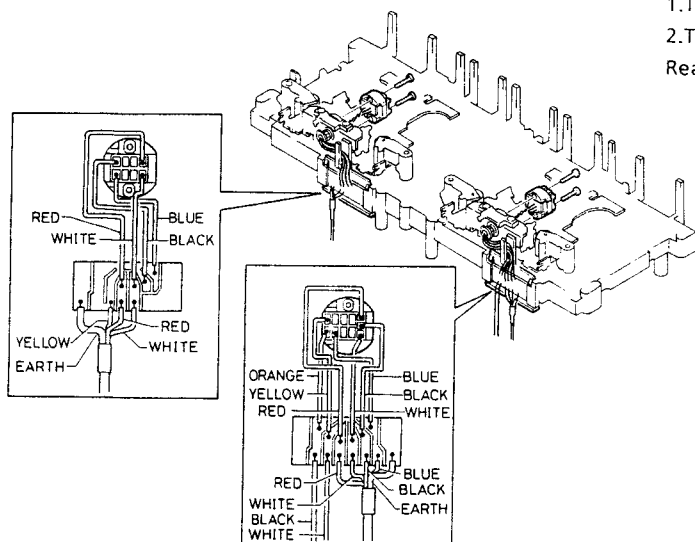


3. Torque Measurements

ITEM	TAKE-UP TORQUE	BACK TENSION	PULLEY TENSION
Test cassette	PLAY : TW2111(FWD) PLAY : TW2121(REV) F.FWD / REW; TW2231	PLAY : TW2111(FWD) PLAY : TW2121(REV) REW: Torque Gage	Driving power cassette: TW-2412(FWD) TW-2422(REV)
PLAY	30 ~ 60gr.cm	2.0 ~ 5.0gr.cm	> 80g
F.FWD	70 ~ 140gr.cm	-	
REW	70 ~ 140gr.cm	-	

DISASSEMBLY (TAPE MECHANISM)

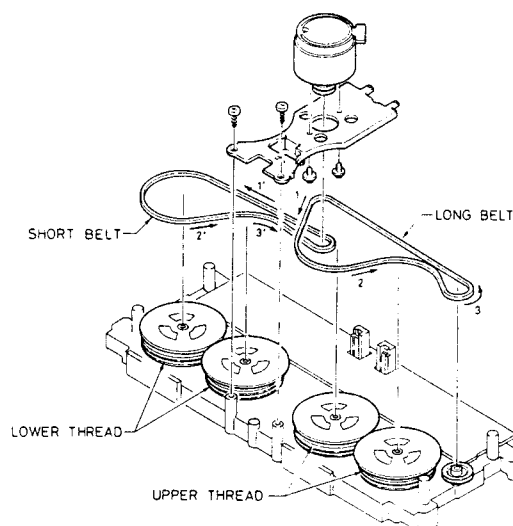
1. Replacement of Head



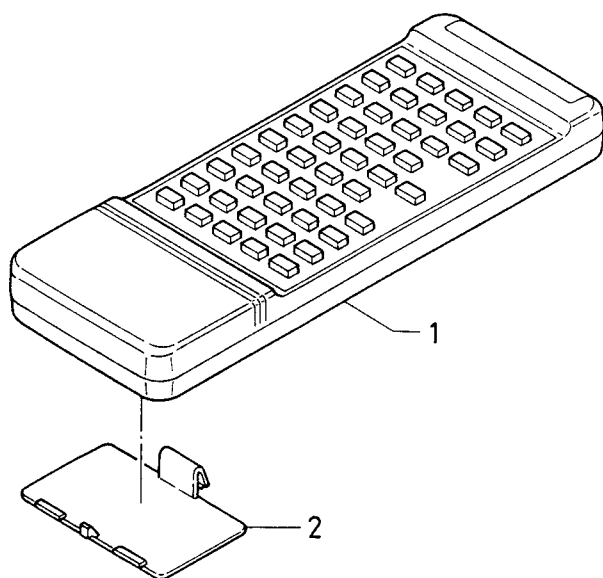
LEAD CONNECTION METHOD OF ROTARY HEAD

- 1.The root (Bonding parts) of leads from head fix the rubber adhesiver.
 - 2.Twit (Turn) the fixed Leads.
- Reason : Cut for rotation

2. Replacement of Motor & Belt



REMOTE CONTROLLER (RB-X900)

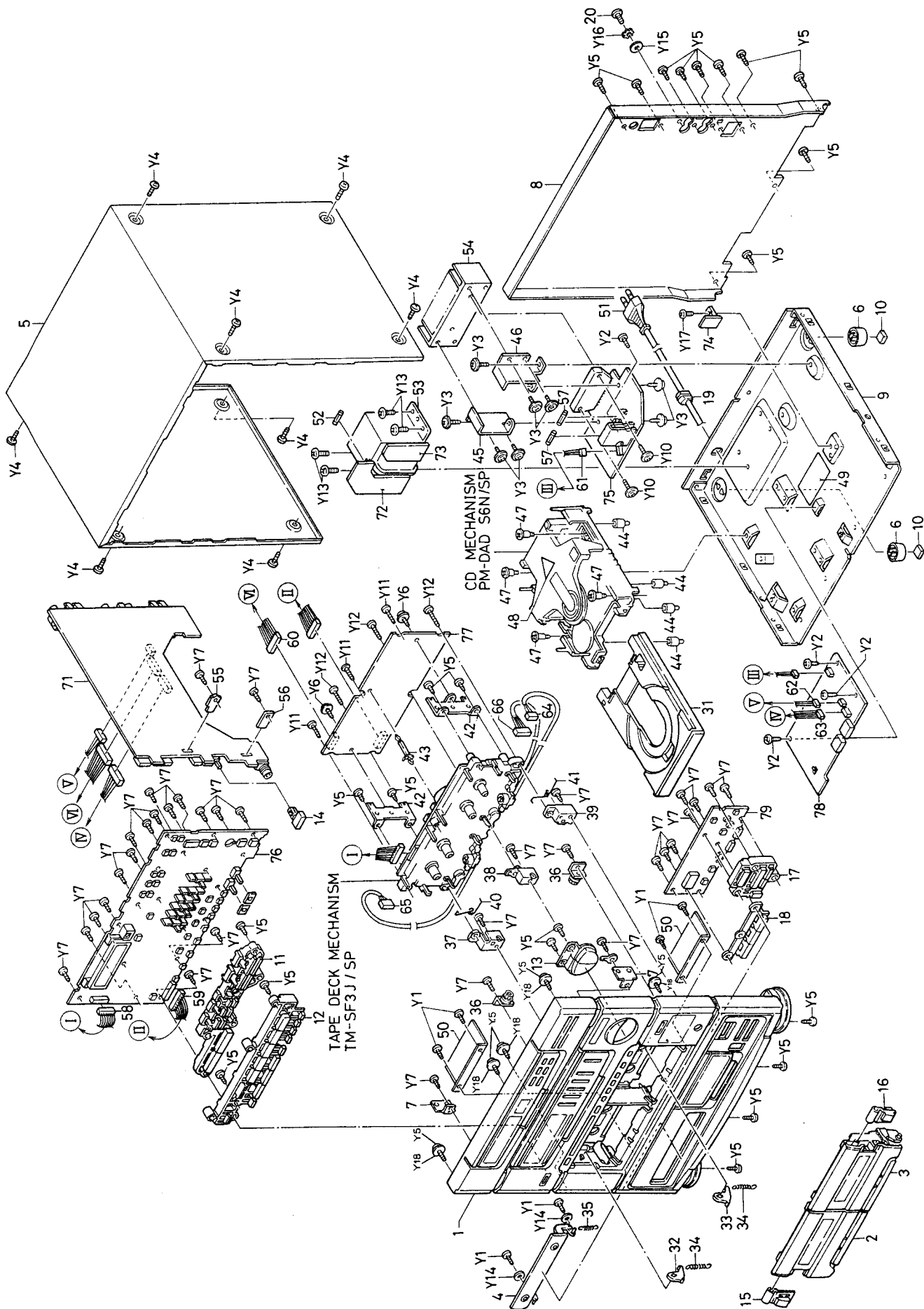


PARTS LIST

REMOTE CONTROLLER (RB-X900)

REF.NO.	PART NO.	DESCRIPTION
1	614 233 7141	ASSY.REMOCON
1	614 233 6717	ASSY.REMOCON
2	614 231 2087	LID.BATTERY

EXPLODED VIEW (CABINET & CHASSIS)



PARTS LIST

PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol Δ in the parts list and the schematic diagram designate components in which safety can be of special significance. When replacing a component identified with Δ , use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

CAUTION : Regular type resistors and capacitors are not listed. To know those values, refer to the schematic diagram.

PACKING & ACCESSORIES

REF.NO.	PART NO.	DESCRIPTION
	614 233 0753	INNER CARTON
	614 231 4180	PAD.TOP
	614 231 4173	PAD.BOTTOM
	614 231 6672	POLY COVER.SET
	614 176 3231	INNER POLYE COVER,INST
	614 231 2490	POLY COVER.REMOCON
	614 176 1039	INNER POLYE COVER,SCREW OF AM ANT
	614 233 0807	INSTRUCTION MANUAL
	614 231 6832	LABEL,SAFETY,LASER
	614 023 7344	ANT.FM
	614 208 7565	LOOP ANT.AM
	614 212 2341	MOUNT-E.BRACKET,LOOP ANT
	411 083 9307	SCR WOOD RND 3.1X3,AM ANT

REF.NO.	PART NO.	DESCRIPTION
50	614 231 3107	SHIELD.DECK
	614 129 4971	FIXER,LEAD DRESS
OR	614 129 2496	FIXER,LEAD DRESS

FIXING PARTS

REF.NO.	PART NO.	DESCRIPTION
Y1	411 021 2704	SCR S-TPG BIN 2.6X6
Y2	411 021 5705	SCR S-TPG BIN 3X6
Y3	411 020 9803	SCR S-TPG BRZ+FLG 3X6
Y4	411 021 6603	SCR S-TPG BIN 3X8
Y5	411 021 6405	SCR S-TPG BIN 3X8
Y6	411 020 9902	SCR S-TPG BRZ+FLG 3X8
Y7	411 021 3503	SCR S-TPG BIN 3X10
Y8	411 020 8905	SCR S-TPG BRZ+FLG 3X10
Y9	411 021 4005	SCR S-TPG BIN 3X12
Y10	411 020 9506	SCR S-TPG BRZ+FLG 3X16
Y11	411 021 4906	SCR S-TPG BIN 3X20
Y12	411 098 4403	SCR S-TPG BIN 3X25
Y13	411 001 3905	SCR S-TPG BIN 4X6
Y14	411 092 0906	WASHER Z 2.6X10X0.5
Y15	411 105 9704	WASHER Z 3X10X1
Y16	411 008 0402	WASHER OUT TW 3
Y17	411 001 1901	SCR S-TPG BIN 3X6
Y18	411 092 3709	WASHER Z 3X13X1

CABINET & CHASSIS

REF.NO.	PART NO.	DESCRIPTION
1	614 228 4421	ASSY,PANEL,FRONT
2	614 227 8253	ASSY,LID,CASSETTE,DECK 1
3	614 229 7995	ASSY,LID,CASSETTE,DECK 2
4	614 228 4667	DOOR,CD TRAY
5	614 232 7616	ASSY,CABINET
6	614 207 2387	FOOT,STAND,REAR
7	614 207 2394	BRACKET-E.FRONT FIX
8	614 229 8084	PANEL,REAR
9	614 229 8022	CABINET,BOTTOM
10	614 106 4215	STAND,FOOT
11	614 228 4995	BUTTON,TUNER
12	614 231 7488	BUTTON,AMP DECK
13	614 228 4544	BUTTON,VR
14	614 228 0218	BUTTON,BASS
15	614 227 8338	BUTTON,EJECT L
16	614 227 8345	BUTTON,EJECT R
17	614 228 4032	BUTTON,CD(OPEN/CLOSE)
18	614 228 4551	BUTTON,CD(EDIT)
19	614 129 1901	FIXER,AC CORD
20	412 003 2804	SPECIAL SCREW,PHONO EARTH
31	614 221 1410	TABLE,LOADING,CD TRAY
32	614 221 8983	LEVER,DECK EJECT L
33	614 221 8990	LEVER,DECK EJECT R
34	614 208 9606	SPRING,TENS,EJECT LEVER
35	614 221 0246	SPRING,TENS,CD DOOR
36	614 069 0385	GEAR ASSY,DAMPER
37	614 227 8383	MOUNT-M,DECK L
38	614 227 8390	MOUNT-M,DECK C
39	614 227 8406	MOUNT-M,DECK R
40	614 227 8475	SPRING,WIRE,LID OPEN L
41	614 227 8482	SPRING,WIRE,LID OPEN R
42	614 221 8839	BRACKET-E,DECK PCB FIX
43	614 129 5558	FIXER,DECK PCB FIX
44	614 124 8899	RUBBER CUSHION,CD MECHANISM
45	614 207 3490	BRACKET-E.HEAT SINK FIX,L
46	614 207 3506	BRACKET-E.HEAT SINK FIX,R
47	412 004 5705	SPECIAL SCREW,CD MECHANISM
48	614 191 3698	LABEL,LASER
49	614 232 0464	LABEL,SAFETY,LASER

ELECTRICAL PARTS

REF.NO.	PART NO.	DESCRIPTION
51	Δ 614 023 3100	POWER CORD,AC
52	Δ 423 016 9803	FUSE 250V 0.63A,FU999
53	Δ 614 230 1975	POWER TRANSFORMER(P.T),AC
54	Δ 614 209 4259	HEAT SINK,FOR IC752
55	614 233 3419	PCB,FIX PCB1
56	614 233 3433	PCB,FIX PCB2
57	Δ 423 016 7908	FUSE 250V 2.5A,SP,FU701-801
58	614 231 7280	ASSY,CONNECTOR-S,8P,FRONT-MECHA (CN001)
59	614 231 7273	ASSY,CONNECTOR-S,8P,FRONT-DECK (CN003)
60	614 231 6269	ASSY,CONNECTOR-S,8P,AMP-DECK LEAD (CN311)
61	614 234 5863	ASSY,CONNECTOR-S,3P, CD-POWER-AMP PCB(CN120)
62	614 234 5870	ASSY,CONNECTOR-S,3P, CD-TU/PRE-AMP PCB(CN121)
63	614 234 5887	ASSY,CONNECTOR-S,5P, CD-TU/PRE-AMP PCB(CN122)
64	614 231 2599	ASSY,CONNECTOR-S,2P,E HEAD(CN341)
65	614 231 2575	ASSY,CONNECTOR-S,4P,P HEAD(CN381)
66	614 231 2582	ASSY,CONNECTOR-S,5P,R/P HEAD (CN382)

PARTS LIST

TUNER/PRE-AMPLIFIER P.C. BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
71	614 230 1364	ASSY.PCB.AMP.TU
	614 051 9785	LUG.FRONT BRACKET
C2152	403 082 2007	POLYPRO 510P J 100V
C2155	403 082 2007	POLYPRO 510P J 100V
C2304	403 080 5000	POLYPRO 1000P J 100V
C2451	403 019 0403	CERAMIC 24P J 50V NPO
C2452	403 019 0403	CERAMIC 24P J 50V NPO
C2458	403 106 1603	NP-ELECT 1U Q 50V
C4003	403 062 5103	POLYESTER 5600P K 50V
C4004	403 062 5103	POLYESTER 5600P K 50V
C4005	403 057 0403	POLYESTER 0.01U K 50V
CF201	614 231 0199	FILTER.FM
CF202	614 231 0199	FILTER.FM
CF203	614 231 0199	FILTER.FM
CF204	614 211 2939	FILTER.AM
CF205	614 030 7443	I.F FILTER.AM
CN201	614 210 2688	TERMINAL.ANT(DIN+PUSH 2P)
CN491	614 227 0011	SOCKET.10P(B TO B).TO FRONT1
CN492	614 226 9985	SOCKET.6P(B TO B).TO FRONT2
CN493	614 226 9985	SOCKET.6P(B TO B).TO FRONT3
CN700	614 017 2171	PLUG.10P.TO DECK
CN701	614 017 2140	PLUG.7P.TO POWER-AMP
CN702	614 017 1440	PLUG.3P.TO POWER-AMP
CN705	614 017 2591	PLUG.8P.TO DECK
CN710	614 017 2560	PLUG.5P.TO CD MAIN
CN711	614 017 2546	PLUG.3P.TO CD MAIN
CN730	614 226 9985	SOCKET.6P(B TO B).TO FRONT4
CN731	614 226 9985	SOCKET.6P(B TO B).TO FRONT5
CN750	614 035 2702	SOCKET.2P(RCA PIN).PHONO
CN751	614 035 2702	SOCKET.2P(RCA PIN).VIDEO
CN752	614 035 1712	SOCKET.HEADPHONE
CN753	614 218 0068	TERMINAL.4P.SPEAKER
CT251	614 007 6332	TRIMMER.30PF(GR)
CT252	614 007 6356	TRIMMER.11PF(WH)
D2151	407 091 5004	VARACTOR DI SVC321SPA-C-2
D2152	407 091 5004	VARACTOR DI SVC321SPA-C-2
D2201	407 007 9904	DIODE GMA01
OR	407 012 4406	DIODE 1SS133
OR	407 012 5809	DIODE 1SS176
D2301	407 007 9904	DIODE GMA01
OR	407 012 4406	DIODE 1SS133
OR	407 012 5809	DIODE 1SS176
D2302	407 007 9904	DIODE GMA01
OR	407 012 4406	DIODE 1SS133
OR	407 012 5809	DIODE 1SS176
D2354	407 007 9904	DIODE GMA01
OR	407 012 4406	DIODE 1SS133
OR	407 012 5809	DIODE 1SS176
D2355	407 007 9904	DIODE GMA01
OR	407 012 4406	DIODE 1SS133
OR	407 012 5809	DIODE 1SS176
D2451	407 005 4505	DIODE DS442X
OR	407 013 1701	DIODE 1S1588
OR	407 013 7109	DIODE 1S2473
D4061	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
OR	407 012 5809	DIODE 1SS176
D4062	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
OR	407 012 5809	DIODE 1SS176
D4083	407 005 4505	DIODE DS442X
OR	407 013 7109	DIODE 1S2473
OR	407 013 1701	DIODE 1S1588
D4084	407 007 9904	DIODE GMA01
OR	407 012 4406	DIODE 1SS133
OR	407 012 5809	DIODE 1SS176
D4851	407 053 3208	ZENER DIODE MTZ12B
D4852	407 012 4406	DIODE 1SS133

REF.NO.	PART NO.	DESCRIPTION
D4852	407 007 9904	DIODE GMA01
OR	407 012 5809	DIODE 1SS176
D4920	407 053 6704	ZENER DIODE MTZ5.6B
D4921	407 053 6704	ZENER DIODE MTZ5.6B
IC201	409 195 3108	IC LA1265-AUD
IC202	409 016 9500	IC LA3361
IC203	409 066 7600	IC LM7001
IC701	409 018 4909	IC LA6458S
IC702	409 003 9308	IC BU4051B
IC703	409 018 4909	IC LA6458S
IC751	409 018 4305	IC LA6458D
IC802	409 003 9308	IC BU4051B
IC902	409 020 2900	IC LB1433N
L2151	614 216 1029	TRANS.RF.LW
L2152	614 032 8059	ANT COIL.MW
L2153	614 033 8904	O.S.C COIL.MW
L2154	614 034 1003	O.S.C COIL.LW
L2190	614 034 7135	VHF COIL.AM ANT
L2191	614 034 7135	VHF COIL.AM ANT
L2201	614 028 4379	FILTER.1000UH
L2451	614 028 4256	FILTER.100 UH
Q2105	405 012 5904	TR 2SC1923-Y
Q2152	405 016 2206	TR 2SC2878-A
OR	405 016 2305	TR 2SC2878-B
Q2153	405 016 2206	TR 2SC2878-A
OR	405 016 2305	TR 2SC2878-B
Q2154	405 016 2206	TR 2SC2878-A
OR	405 016 2305	TR 2SC2878-B
Q2155	405 016 2206	TR 2SC2878-A
OR	405 016 2305	TR 2SC2878-B
Q2156	405 016 2206	TR 2SC2878-A
OR	405 016 2305	TR 2SC2878-B
Q2157	405 078 5405	TR 2SK301-R
Q2158	405 012 2002	TR 2SC1815-GR
OR	405 020 7204	TR 2SC945A-T-K
Q2201	405 018 7902	TR 2SC380TM-O
Q2202	405 012 2002	TR 2SC1815-GR
OR	405 020 7204	TR 2SC945A-K
Q2203	405 001 7001	TR 2SA1015-GR
Q2301	405 012 2002	TR 2SC1815-GR
OR	405 020 7204	TR 2SC945A-K
Q2302	405 067 0800	TR RN2207
OR	405 078 2404	TR BN1A4P
OR	405 000 0904	TR DTA114YS
Q2351	405 067 0800	TR RN2207
OR	405 078 2404	TR BN1A4P
OR	405 000 0904	TR DTA114YS
Q2352	405 067 0800	TR RN2207
OR	405 078 2404	TR BN1A4P
OR	405 000 0904	TR DTA114YS
Q2353	405 067 0800	TR RN2207
OR	405 078 2404	TR BN1A4P
OR	405 000 0904	TR DTA114YS
Q2354	405 067 0800	TR RN2207
OR	405 078 2404	TR BN1A4P
OR	405 000 0904	TR DTA114YS
Q2355	405 067 0800	TR RN2207
OR	405 078 2404	TR BN1A4P
OR	405 000 0904	TR DTA114YS
Q2451	405 078 4903	TR 2SC2634-R
OR	405 078 5009	TR 2SC2634-S
Q2452	405 078 4903	TR 2SC2634-R
OR	405 078 5009	TR 2SC2634-S
Q2453	405 012 2002	TR 2SC1815-GR
OR	405 020 7204	TR 2SC945A-K
Q2701	405 012 2002	TR 2SC1815-GR
OR	405 020 7204	TR 2SC945A-K
Q2702	405 016 2206	TR 2SC2878-A

PARTS LIST

REF.NO.	PART NO.	DESCRIPTION
Q2702	405 016 2305	TR 2SC2878-B
Q2801	405 012 2002	TR 2SC1815-GR
OR	405 020 7204	TR 2SC945A-K
Q2802	405 016 2206	TR 2SC2878-A
OR	405 016 2305	TR 2SC2878-B
Q2901	405 012 2002	TR 2SC1815-GR
OR	405 020 7204	TR 2SC945A-K
Q4072	405 012 2002	TR 2SC1815-GR
OR	405 020 7204	TR 2SC945A-K
Q4083	405 000 6104	TR DTC144ES
OR	405 078 3005	TR BA1L4M
OR	405 001 0408	TR RN1204
OR	405 018 2501	TR 2SC3399
Q4084	405 012 2002	TR 2SC1815-GR
OR	405 020 7204	TR 2SC945A-K
Q4581	405 012 2002	TR 2SC1815-GR
OR	405 020 7204	TR 2SC945A-K
Q4582	405 107 8704	TR BA1A4Z
OR	405 000 3400	TR DTC114TS
OR	405 037 0205	TR 2SC3860
OR	405 035 1600	TR RN1211
Q4583	405 012 2002	TR 2SC1815-GR
OR	405 020 7204	TR 2SC945A-K
Q4681	405 012 2002	TR 2SC1815-GR
OR	405 020 7204	TR 2SC945A-K
Q4682	405 107 8704	TR BA1A4Z
OR	405 000 3400	TR DTC114TS
OR	405 037 0205	TR 2SC3860
OR	405 035 1600	TR RN1211
Q4683	405 012 2002	TR 2SC1815-GR
OR	405 020 7204	TR 2SC945A-K
Q4851	405 015 1606	TR 2SC2655-Y
R2465	△401 018 1209	CARBON 33 JB 1/4W
R4709	401 009 5506	CARBON 330 JB 1/2W
R4809	401 009 5506	CARBON 330 JB 1/2W
R4851	△402 023 1703	FUSIBLE RES 100 J-1/4W
RY701	614 224 4531	RELAY.SP
S3181	614 012 4316	SWITCH.BEAT CANCEL
OR	614 023 8297	SWITCH.BEAT CANCEL
S4701	614 230 2521	SWITCH.PUSH.BASSXPANDER
SVR23	614 204 1901	SEMI-FIXED V.R.10K OHM(B)
T2202	614 030 4114	I.F.T.FM
T2203	614 029 3906	MX COIL.LPF
T2701	614 027 7845	CHOKE.TRAP.L
T2801	614 027 7845	CHOKE.TRAP.R
TRO01	614 232 6404	TERMINAL.PHONO EARTH
TRO02	614 234 1728	TERMINAL.PCB FIX
TU201	620 208 3087	TUNER.FM.FRONT END
X2451	614 229 2457	CRYSTAL.7.2MHZ

P.T PRIMARY P.C.B. BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
72	614 230 1418	ASSY.PCB.P.T-PRI
	614 017 8203	TERMINAL BOARD.AC-IN
F9999	△614 229 0422	INDUCTOR.FERITE
FCLP5	614 208 4540	FUSE HOLDER.FOR FU999
FCLP6	614 208 4540	FUSE HOLDER.FOR FU999

P.T SECONDARY P.C.B. BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
73	614 230 1463	ASSY.PCB.P.T-SEC
CN770	614 020 6579	SOCKET.SP.TO POWER-AMP
OR	614 223 9230	SOCKET.SP.TO POWER-AMP
CN771	614 020 1246	SOCKET.SP.TO POWER-AMP

REF.NO.	PART NO.	DESCRIPTION
ICP51	△614 205 2914	IC PROTECTOR ICP-N25
ICP52	△614 205 2914	IC PROTECTOR ICP-N25
R4931	△402 044 6701	RESISTOR 0.47 J-1/2W
R4932	△402 044 0907	FUSIBLE RES 1 J-1/4W
R4935	△402 044 1607	RESISTOR 0.33 J-1/2W
R4936	△402 044 1607	RESISTOR 0.33 J-1/2W

REGULATOR IC P.C.B. BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
74	614 233 3044	ASSY.PCB.REG-IC
CN750	614 020 6555	SOCKET.3P.TO POWER-AMP
OR	614 223 9216	SOCKET.3P.TO POWER-AMP
IC952	△409 122 6202	IC NJM7812FA
OR	△409 078 2402	IC L7812ML
OR	△409 168 2107	IC UPC7812HF
OR	△409 001 7603	IC AN7812F

POWER AMPLIFIER P.C.B. BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
75	614 230 1531	ASSY.PCB.POWER-AMP
	614 203 7362	HEAT SINK.FOR IC951
C4907	403 053 4405	ELECT 2200U M 35V
C4908	403 053 4405	ELECT 2200U M 35V
CN800	614 020 6623	SOCKET.10P(DIP)
OR	614 223 9285	SOCKET.10P(DIP)
CN801	614 020 6593	SOCKET.7P(DIP)
OR	614 223 9254	SOCKET.7P(DIP)
CN802	614 020 1222	SOCKET.3P(DIP)
CN812	614 017 2546	PLUG.3P.TO CD-MAIN
CN850	614 020 6555	SOCKET.3P.TO REG-IC
OR	614 223 9216	SOCKET.3P.TO REG-IC
CN870	614 020 6579	SOCKET.SP.TO P.T-SEC
OR	614 223 9230	SOCKET.SP.TO P.T-SEC
CN871	614 020 1246	SOCKET.SP.TO P.T-SEC
CN900	614 231 4302	SOCKET.10P.TO TUN/PRE-AMP
CN901	614 211 3349	SOCKET.7P.TO TUN/PRE-AMP
CN902	614 233 3082	ASSY.CONNECTOR-S.3P. TO TUN/PRE-AMP(SP OUT)
D4081	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
OR	407 012 5809	DIODE 1SS176
D4831	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
OR	407 012 5809	DIODE 1SS176
D4832	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
OR	407 012 5809	DIODE 1SS176
D4901	407 077 7800	DIODE RBV-402LF-A
D4906	407 053 3802	ZENER DIODE MTZ15C
D4910	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
OR	407 012 5809	DIODE 1SS176
D4911	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
OR	407 012 5809	DIODE 1SS176
D4912	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
OR	407 012 5809	DIODE 1SS176
D4913	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
OR	407 012 5809	DIODE 1SS176
D4914	407 050 2204	ZENER DIODE GZA30Y
D4931	407 012 3300	DIODE 1SR35-200A
D4932	407 012 3300	DIODE 1SR35-200A

PARTS LIST

REF.NO.	PART NO.	DESCRIPTION
D4933	407 012 3300	DIODE 1SR35-200A
D4934	407 012 3300	DIODE 1SR35-200A
FCLP1	614 208 4540	FUSE HOLDER, FOR FU701
FCLP2	614 208 4540	FUSE HOLDER, FOR FU701
FCLP3	614 208 4540	FUSE HOLDER, FOR FU801
FCLP4	614 208 4540	FUSE HOLDER, FOR FU801
IC752	409 047 0200	IC STK4132MK2
IC951	409 027 1005	IC L780S12
Q4070	405 012 2002	TR 2SC1815-GR
OR	405 020 7204	TR 2SC945A-K
Q4071	405 012 2002	TR 2SC1815-GR
OR	405 020 7204	TR 2SC945A-K
Q4831	405 012 2002	TR 2SC1815-GR
OR	405 020 7204	TR 2SC945A-K
Q4903	405 015 1606	TR 2SC2655-Y
Q4904	405 001 9302	TR 2SA1020-Y
Q4905	405 001 7209	TR 2SA1015-Y
Q4910	405 001 9302	TR 2SA1020-Y
R4706	401 008 7204	CARBON 2.2K JB 1/2W
R4708	401 010 5908	CARBON 5.6 JB 1/2W
R4806	401 008 7204	CARBON 2.2K JB 1/2W
R4808	401 010 5908	CARBON 5.6 JB 1/2W
R4841	△402 023 1703	FUSIBLE RES 100 J-1/4W
R4844	△402 023 1703	FUSIBLE RES 100 J-1/4W
R4909	△402 004 4303	FUSIBLE RES 10 J-1/4W
R4910	△402 004 4303	FUSIBLE RES 10 J-1/4W
R4920	△402 004 6406	FUSIBLE RES 3.9 J-1/4W
R4921	△402 023 1703	FUSIBLE RES 100 J-1/4W

FRONT P.C. BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
76	614 230 6000	ASSY.PCB.FRONT
	614 228 0232	MOUNT-E.L.TUN FL
	614 228 0249	MOUNT-E.R.TUN FL
C4573	403 135 3302	ELECT 1000U M 6.3V
OR	403 196 4102	ELECT 1000U M 6.3V
C5021	403 196 9602	DL-ELECT 0.047F Z 5.5V
CN001	614 017 2591	PLUG.8P.TO DECK 1 MECHANISM
CN002	614 231 5330	ASSY.CONNECTOR-S.8P, TO DECK 2 MECHANISM
CN003	614 017 3871	PLUG.8P.TO DECK-AMP
CN004	614 226 9978	PLUG.10P(B TO B).TO TUN/PRE-AMP
CN005	614 226 9930	PLUG.6P(B TO B).TO TUN/PRE-AMP
CN006	614 226 9930	PLUG.6P(B TO B).TO TUN/PRE-AMP
CN007	614 226 9930	PLUG.6P(B TO B).TO TUN/PRE-AMP
CN008	614 226 9930	PLUG.6P(B TO B).TO TUN/PRE-AMP
D4100	408 013 3207	LED SLZ-381C-09-A.LEVEL METER, LEFT
OR	408 013 3306	LED SLZ-381C-09-B.LEVEL METER, LEFT
D4101	408 013 3207	LED SLZ-381C-09-A.LEVEL METER, LEFT
OR	408 013 3306	LED SLZ-381C-09-B.LEVEL METER, LEFT
D4102	408 013 3207	LED SLZ-381C-09-A.LEVEL METER, LEFT
OR	408 013 3306	LED SLZ-381C-09-B.LEVEL METER, LEFT
D4103	408 013 3207	LED SLZ-381C-09-A.LEVEL METER, LEFT
OR	408 013 3306	LED SLZ-381C-09-B.LEVEL METER, LEFT
D4104	408 013 3207	LED SLZ-381C-09-A.LEVEL METER, LEFT
OR	408 013 3306	LED SLZ-381C-09-B.LEVEL METER, LEFT

REF.NO.	PART NO.	DESCRIPTION
D4200	408 013 3207	LED SLZ-381C-09-A.LEVEL METER, RIGHT
OR	408 013 3306	LED SLZ-381C-09-B.LEVEL METER, RIGHT
D4201	408 013 3207	LED SLZ-381C-09-A.LEVEL METER, RIGHT
OR	408 013 3306	LED SLZ-381C-09-B.LEVEL METER, RIGHT
D4202	408 013 3207	LED SLZ-381C-09-A.LEVEL METER, RIGHT
OR	408 013 3306	LED SLZ-381C-09-B.LEVEL METER, RIGHT
D4203	408 013 3207	LED SLZ-381C-09-A.LEVEL METER, RIGHT
OR	408 013 3306	LED SLZ-381C-09-B.LEVEL METER, RIGHT
D4204	408 013 3207	LED SLZ-381C-09-A.LEVEL METER, RIGHT
OR	408 013 3306	LED SLZ-381C-09-B.LEVEL METER, RIGHT
D4570	407 013 1701	DIODE 1S1588
OR	407 013 7109	DIODE 1S2473
OR	407 005 4505	DIODE DS442X
D4571	407 012 5809	DIODE 1SS176
OR	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
D4572	407 012 5809	DIODE 1SS176
OR	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
D4573	407 144 4206	ZENER DIODE MTZ3.0A
OR	407 070 4004	ZENER DIODE 6ZS3.0X
D4590	408 013 2903	LED SLZ-181C-09-A.VOL METER.10
OR	408 013 3009	LED SLZ-181C-09-B.VOL METER.10
D4591	408 013 2903	LED SLZ-181C-09-A.VOL METER.20
OR	408 013 3009	LED SLZ-181C-09-B.VOL METER.20
D4592	408 013 2903	LED SLZ-181C-09-A.VOL METER.30
OR	408 013 3009	LED SLZ-181C-09-B.VOL METER.30
D4593	408 013 2903	LED SLZ-181C-09-A.VOL METER.40
OR	408 013 3009	LED SLZ-181C-09-B.VOL METER.40
D4594	408 013 2903	LED SLZ-181C-09-A.VOL METER.50 (MAX)
OR	408 013 3009	LED SLZ-181C-09-B.VOL METER.50 (MAX)
D5010	407 012 5809	DIODE 1SS176
OR	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
D5019	407 012 5809	DIODE 1SS176
OR	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
D5020	407 012 5809	DIODE 1SS176
OR	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
D5025	407 053 7503	ZENER DIODE MTZ6.8A
OR	407 051 7406	ZENER DIODE 6ZS6.8X
D5030	407 053 5301	ZENER DIODE MTZ3.9C
OR	407 051 5907	ZENER DIODE 6ZS3.9Z
D5050	407 013 1701	DIODE 1S1588
OR	407 013 7109	DIODE 1S2473
OR	407 005 4505	DIODE DS442X
D5051	407 013 1701	DIODE 1S1588
OR	407 013 7109	DIODE 1S2473
OR	407 005 4505	DIODE DS442X
D5052	407 013 1701	DIODE 1S1588
OR	407 013 7109	DIODE 1S2473
OR	407 005 4505	DIODE DS442X
D5053	407 013 1701	DIODE 1S1588
OR	407 013 7109	DIODE 1S2473
OR	407 005 4505	DIODE DS442X

PARTS LIST

REF.NO.	PART NO.	DESCRIPTION
D5054	407 012 5809	DIODE 1SS176
OR	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
D5055	407 012 5809	DIODE 1SS176
OR	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
D5056	407 012 5809	DIODE 1SS176
OR	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
D5057	407 012 5809	DIODE 1SS176
OR	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
D5058	407 012 5809	DIODE 1SS176
OR	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
D5059	407 012 5809	DIODE 1SS176
OR	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
D5060	407 012 5809	DIODE 1SS176
OR	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
D5061	407 012 5809	DIODE 1SS176
OR	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
D5062	407 012 5809	DIODE 1SS176
OR	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
D5063	407 013 1701	DIODE 1S1588
OR	407 013 7109	DIODE 1S2473
OR	407 005 4505	DIODE DS442X
D5070	407 012 5809	DIODE 1SS176
OR	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
D5099	407 053 6704	ZENER DIODE MTZ5.6B
OR	407 051 6904	ZENER DIODE GZS5.6Y
D5220	407 013 1701	DIODE 1S1588
OR	407 013 7109	DIODE 1S2473
OR	407 005 4505	DIODE DS442X
D5221	407 013 1701	DIODE 1S1588
OR	407 013 7109	DIODE 1S2473
OR	407 005 4505	DIODE DS442X
D5310	407 012 5809	DIODE 1SS176
OR	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
D5311	407 012 5809	DIODE 1SS176
OR	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
D5320	407 013 1701	DIODE 1S1588
OR	407 013 7109	DIODE 1S2473
OR	407 005 4505	DIODE DS442X
D5321	407 013 1701	DIODE 1S1588
OR	407 013 7109	DIODE 1S2473
OR	407 005 4505	DIODE DS442X
D5322	407 013 1701	DIODE 1S1588
OR	407 013 7109	DIODE 1S2473
OR	407 005 4505	DIODE DS442X
D5323	407 013 1701	DIODE 1S1588
OR	407 013 7109	DIODE 1S2473
OR	407 005 4505	DIODE DS442X
D5324	407 012 5809	DIODE 1SS176
OR	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
D5325	407 012 5809	DIODE 1SS176
OR	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
D5330	407 012 5809	DIODE 1SS176
OR	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01

REF.NO.	PART NO.	DESCRIPTION
D5331	407 012 5809	DIODE 1SS176
OR	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
D5332	407 012 5809	DIODE 1SS176
OR	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
D5350	408 013 3207	LED SLZ-381C-09-A.FOW
OR	408 013 3306	LED SLZ-381C-09-B.FOW
D5351	408 013 3207	LED SLZ-381C-09-A.REV
OR	408 013 3306	LED SLZ-381C-09-B.REV
D5352	408 013 2903	LED SLZ-181C-09-A.REC
OR	408 013 3009	LED SLZ-181C-09-B.REC
D5353	408 013 2903	LED SLZ-181C-09-A.B
OR	408 013 3009	LED SLZ-181C-09-B.B
D5354	408 013 2903	LED SLZ-181C-09-A.A
OR	408 013 3009	LED SLZ-181C-09-B.A
D5410	408 013 2903	LED SLZ-181C-09-A.TAPE
OR	408 013 3009	LED SLZ-181C-09-B.TAPE
D5411	408 013 2903	LED SLZ-181C-09-A.CD
OR	408 013 3009	LED SLZ-181C-09-B.CD
D5412	408 013 2903	LED SLZ-181C-09-A.PHONO
OR	408 013 3009	LED SLZ-181C-09-B.PHONO
D5413	408 013 2903	LED SLZ-181C-09-A.TUNER
OR	408 013 3009	LED SLZ-181C-09-B.TUNER
D5414	408 013 2903	LED SLZ-181C-09-A.AUX 1
OR	408 013 3009	LED SLZ-181C-09-B.AUX 1
D5415	407 012 5809	DIODE 1SS176
OR	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
D5416	407 012 5809	DIODE 1SS176
OR	407 012 4406	DIODE 1SS133
OR	407 007 9904	DIODE GMA01
D5420	407 053 6704	ZENER DIODE MTZ5.6B
OR	407 051 6904	ZENER DIODE GZS5.6Y
FL500	614 226 7561	FLUORESCENT TUBE
IC410	409 020 0906	IC LB1403N
OR	409 003 0008	IC BA6124
IC420	409 020 0906	IC LB1403N
OR	409 003 0008	IC BA6124
IC450	409 218 4303	IC RC4558S
OR	409 018 4909	IC LA6458S
IC457	409 218 4303	IC RC4558S
OR	409 018 4909	IC LA6458S
IC458	409 053 0409	IC TC9153AP
IC459	409 020 2900	IC LB1433N
IC500	410 118 3105	IC HD404729A98S
L5020	614 028 4256	FILTER,100UH
Q4670	405 078 3005	TR BA1L4M
OR	405 018 2501	TR 2SC3399
OR	405 000 6104	TR DTC144ES
OR	405 001 0408	TR RN1204
Q4671	405 078 3005	TR BA1L4M
OR	405 018 2501	TR 2SC3399
OR	405 000 6104	TR DTC144ES
OR	405 001 0408	TR RN1204
Q4672	405 078 3005	TR BA1L4M
OR	405 018 2501	TR 2SC3399
OR	405 000 6104	TR DTC144ES
OR	405 001 0408	TR RN1204
Q4673	405 078 3005	TR BA1L4M
OR	405 018 2501	TR 2SC3399
OR	405 000 6104	TR DTC144ES
OR	405 001 0408	TR RN1204
Q5010	405 091 4201	TR BN1L4Z
OR	405 004 0504	TR 2SA1509
OR	405 075 7907	TR DTA144TS
Q5011	405 057 7604	TR 2SA1175-FF
OR	405 002 1107	TR 2SA1048-GR

PARTS LIST

REF.NO.	PART NO.	DESCRIPTION
Q5011	405 002 5402	TR 2SA1175-EF
OR	405 003 5302	TR 2SA1317-T
OR	405 003 5401	TR 2SA1317-U
OR	405 006 1806	TR 2SA933S-R
OR	405 006 1905	TR 2SA933S-S
Q5025	405 020 7402	TR 2SC945A-P
OR	405 011 7404	TR 2SC1740-R
OR	405 011 7503	TR 2SC1740-S
OR	405 012 2002	TR 2SC1815-GR
OR	405 018 0101	TR 2SC3331-T
OR	405 018 0200	TR 2SC3331-U
OR	405 020 7204	TR 2SC945A-K
Q5030	405 091 4201	TR BN1L4Z
OR	405 004 0504	TR 2SA1509
OR	405 075 7907	TR DTA144TS
Q5220	405 091 4201	TR BN1L4Z
OR	405 004 0504	TR 2SA1509
OR	405 075 7907	TR DTA144TS
Q5221	405 091 4201	TR BN1L4Z
OR	405 004 0504	TR 2SA1509
OR	405 075 7907	TR DTA144TS
Q5310	405 091 4201	TR BN1L4Z
OR	405 004 0504	TR 2SA1509
OR	405 075 7907	TR DTA144TS
Q5311	405 091 4201	TR BN1L4Z
OR	405 004 0504	TR 2SA1509
OR	405 075 7907	TR DTA144TS
Q5320	405 091 4201	TR BN1L4Z
OR	405 004 0504	TR 2SA1509
OR	405 075 7907	TR DTA144TS
Q5321	405 091 4201	TR BN1L4Z
OR	405 004 0504	TR 2SA1509
OR	405 075 7907	TR DTA144TS
Q5322	405 091 4201	TR BN1L4Z
OR	405 004 0504	TR 2SA1509
OR	405 075 7907	TR DTA144TS
Q5323	405 091 4201	TR BN1L4Z
OR	405 004 0504	TR 2SA1509
OR	405 075 7907	TR DTA144TS
Q5324	405 091 4201	TR BN1L4Z
OR	405 004 0504	TR 2SA1509
OR	405 075 7907	TR DTA144TS
Q5325	405 091 4201	TR BN1L4Z
OR	405 004 0504	TR 2SA1509
OR	405 075 7907	TR DTA144TS
Q5330	405 105 7204	TR BA1L4Z
OR	405 037 0601	TR 2SC3899
OR	405 075 8409	TR DTC144TS
Q5331	405 105 7204	TR BA1L4Z
OR	405 037 0601	TR 2SC3899
OR	405 075 8409	TR DTC144TS
Q5340	405 078 2909	TR BA1A4M
OR	405 018 2808	TR 2SC3402
OR	405 000 3103	TR DTC114ES
OR	405 001 0200	TR RN1202
Q5341	405 078 2909	TR BA1A4M
OR	405 018 2808	TR 2SC3402
OR	405 000 3103	TR DTC114ES
OR	405 001 0200	TR RN1202
Q5342	405 078 2909	TR BA1A4M
OR	405 018 2808	TR 2SC3402
OR	405 000 3103	TR DTC114ES
OR	405 001 0200	TR RN1202
Q5350	405 057 7604	TR 2SA1175-FF
OR	405 002 1107	TR 2SA1048-GR
OR	405 002 5402	TR 2SA1175-EF
OR	405 003 5302	TR 2SA1317-T
OR	405 003 5401	TR 2SA1317-U

PARTS LIST

REF.NO.	PART NO.	DESCRIPTION
Q5350	405 006 1806	TR 2SA933S-R
OR	405 006 1905	TR 2SA933S-S
Q5351	405 057 7604	TR 2SA1175-FF
OR	405 002 1107	TR 2SA1048-GR
OR	405 002 5402	TR 2SA1175-EF
OR	405 003 5302	TR 2SA1317-T
OR	405 003 5401	TR 2SA1317-U
OR	405 006 1806	TR 2SA933S-R
OR	405 006 1905	TR 2SA933S-S
Q5352	405 057 7604	TR 2SA1175-FF
OR	405 002 1107	TR 2SA1048-GR
OR	405 002 5402	TR 2SA1175-EF
OR	405 003 5302	TR 2SA1317-T
OR	405 003 5401	TR 2SA1317-U
OR	405 006 1806	TR 2SA933S-R
OR	405 006 1905	TR 2SA933S-S
Q5353	405 107 8704	TR BA1A4Z
OR	405 037 0205	TR 2SC3860
OR	405 000 3400	TR DTC114TS
OR	405 035 1600	TR RN1211
Q5354	405 107 8803	TR BN1A4Z
OR	405 036 2903	TR 2SA1497
OR	405 075 7600	TR DTA114TS
OR	405 107 8605	TR RN2211
Q5410	405 078 3005	TR BA1L4M
OR	405 018 2501	TR 2SC3399
OR	405 000 6104	TR DTC144ES
OR	405 001 0408	TR RN1204
Q5411	405 078 2909	TR BA1A4M
OR	405 018 2808	TR 2SC3402
OR	405 000 3103	TR DTC114ES
OR	405 001 0200	TR RN1202
Q5412	405 078 3005	TR BA1L4M
OR	405 018 2501	TR 2SC3399
OR	405 000 6104	TR DTC144ES
OR	405 001 0408	TR RN1204
Q5413	405 057 7802	TR 2SC2785-FF
OR	405 011 8500	TR 2SC1740S-R
OR	405 011 8609	TR 2SC1740S-S
OR	405 014 5209	TR 2SC2458-GR
OR	405 015 6304	TR 2SC2785-EF
OR	405 017 9600	TR 2SC3330-T
OR	405 017 9709	TR 2SC3330-U
Q5414	405 057 7604	TR 2SA1175-FF
OR	405 002 1107	TR 2SA1048-GR
OR	405 002 5402	TR 2SA1175-EF
OR	405 003 5302	TR 2SA1317-T
OR	405 003 5401	TR 2SA1317-U
OR	405 006 1806	TR 2SA933S-R
OR	405 006 1905	TR 2SA933S-S
Q5415	405 078 2909	TR BA1A4M
OR	405 018 2808	TR 2SC3402
OR	405 000 3103	TR DTC114ES
OR	405 001 0200	TR RN1202
Q5420	405 020 7402	TR 2SC945A-P
OR	405 011 7404	TR 2SC1740-R
OR	405 011 7503	TR 2SC1740-S
OR	405 012 2002	TR 2SC1815-GR
OR	405 018 0101	TR 2SC3331-T
OR	405 018 0200	TR 2SC3331-U
OR	405 020 7204	TR 2SC945A-K
Q5440	405 057 7802	TR 2SC2785
OR	405 011 8500	TR 2SC1740S-R
OR	405 011 8609	TR 2SC1740S-S
OR	405 014 5209	TR 2SC2458-GR
OR	405 015 6304	TR 2SC2785-EF
OR	405 017 9600	TR 2SC3330-T
OR	405 017 9709	TR 2SC3330-U

REF.NO.	PART NO.	DESCRIPTION
Q5441	405 057 7802	TR 2SC2785-FF
OR	405 011 8500	TR 2SC1740S-R
OR	405 011 8609	TR 2SC1740S-S
OR	405 014 5209	TR 2SC2458-GR
OR	405 015 6304	TR 2SC2785-EF
OR	405 017 9600	TR 2SC3330-T
OR	405 017 9709	TR 2SC3330-U
R5025	401 168 9902	CARBON 100 JB 1/2W
R5421	401 168 9902	CARBON 100 JB 1/2W
RA500	614 209 3689	RESISTOR 10K X8
OR	614 217 1332	RESISTOR 10K X8
S4670	614 220 5648	SWITCH,TACT,VOL-UP
S4671	614 220 5648	SWITCH,TACT,VOL-DOWN
S5000	614 217 8935	SWITCH,OPTO CONNECTOR,REMOCON RECEIVER
S5050	614 220 5631	SWITCH,TACT,TIMER
S5051	614 220 5631	SWITCH,TACT,WACK UP
S5052	614 220 5631	SWITCH,TACT,SLEEP
S5053	614 220 5631	SWITCH,TACT,CLOCK
S5054	614 220 5631	SWITCH,TACT,POWER
S5200	614 220 5631	SWITCH,TACT,TUN-UP
S5201	614 220 5631	SWITCH,TACT,TUN-DOWN
S5202	614 220 5631	SWITCH,TACT,PST-UP
S5203	614 220 5631	SWITCH,TACT,PST-DOWN
S5204	614 220 5631	SWITCH,TACT,MEMORY
S5205	614 220 5631	SWITCH,TACT,CLEAR
S5206	614 220 5631	SWITCH,TACT,BAND
S5207	614 220 5631	SWITCH,TACT,MODE
S5300	614 220 5631	SWITCH,TACT,STOP
S5301	614 220 5631	SWITCH,TACT,FOW
S5302	614 220 5631	SWITCH,TACT,REV
S5303	614 220 5631	SWITCH,TACT,REC
S5304	614 220 5631	SWITCH,TACT,A/B
S5305	614 220 5631	SWITCH,TACT,SKIP FOW
S5306	614 220 5631	SWITCH,TACT,SKIP REV
S5307	614 220 5631	SWITCH,TACT,MUTE
S5308	614 220 5631	SWITCH,TACT,HI DUB
S5310	614 227 4323	SWITCH,SLIDE,REV MODE
S5315	614 227 4316	SWITCH,SLIDE,DOLBY
S5400	614 220 5631	SWITCH,TACT,TUNER
S5401	614 220 5631	SWITCH,TACT,CD
S5402	614 220 5631	SWITCH,TACT,TAPE
S5403	614 220 5631	SWITCH,TACT,PHONO
S5404	614 220 5631	SWITCH,TACT,AUX 1
VR450	614 229 4307	V.R.SLIDE,100K(W),BALANCE
VR451	614 229 4291	V.R.SLIDE,50K(B)X2.G.-EQUALIZER, 100HZ
VR452	614 229 4291	V.R.SLIDE,50K(B)X2.G.-EQUALIZER, 300HZ
VR453	614 229 4291	V.R.SLIDE,50K(B)X2.G.-EQUALIZER, 1KHZ
VR454	614 229 4291	V.R.SLIDE,50K(B)X2.G.-EQUALIZER, 3KHZ
VR455	614 229 4291	V.R.SLIDE,50K(B)X2.G.-EQUALIZER, 12KHZ
X5000	614 229 3300	RESONATOR,XTAL,4.19MHZ

TAPE DECK AMPLIFIER P.C.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
77	614 235 9440	ASSY,PCB,DECK
C3303	403 058 2406	POLYESTER 0.015U J 50V
C3304	403 058 1102	POLYESTER 1500P K 50V
CN301	614 017 2591	PLUG,8P,TO TUN/PRE-AMP
CN302	614 017 2591	PLUG,8P,TO FRONT
CN303	614 016 4084	PLUG,2P,TEST PIN,HIGH SPEED
CN331	614 017 2539	PLUG,2P,E HEAD

REF.NO.	PART NO.	DESCRIPTION
CN371	614 017 2553	PLUG,4P,P HEAD
CN372	614 017 2560	PLUG,5P,R/P HEAD
CN373	614 035 5949	SOCKET,3P,TEST PIN,TAPE OUT
D3101	407 007 9904	DIODE GMA01
OR	407 012 4406	DIODE 1SS133
D3102	407 007 9904	DIODE GMA01
OR	407 012 4406	DIODE 1SS133
D3103	407 007 9904	DIODE GMA01
OR	407 012 4406	DIODE 1SS133
D3104	407 007 9904	DIODE GMA01
OR	407 012 4406	DIODE 1SS133
D3105	407 005 4505	DIODE DS442X
OR	407 013 7109	DIODE 1S2473
D3106	407 007 9904	DIODE GMA01
OR	407 012 4406	DIODE 1SS133
HS301	614 211 3592	HEAT SINK,BIAS LEAK
IC351	409 119 9803	IC CXA1101P
IC370	409 121 8702	IC LA3246
IC371	409 207 1900	IC MLC4066B
OR	409 003 9506	IC BU4066B
OR	409 051 3501	IC TC4066BP
OR	409 059 2605	IC UPD4066BC
IC374	409 214 1900	IC CXA1298AP
IC375	409 145 8405	IC UPC1330HA
L3300	614 221 8280	TRANS,OSC
L3501	614 029 3807	MX COIL
L3551	614 029 3807	MX COIL
L3700	614 028 4379	FILTER
L3731	614 210 3685	INDUCTOR,FERITE
L3750	614 029 3142	MX COIL
L3800	614 028 4379	FILTER
L3831	614 210 3685	INDUCTOR,FERITE
L3850	614 029 3142	MX COIL
Q3101	405 000 6104	TR DTC144ES
OR	405 078 3005	TR BA1L4M
OR	405 103 9606	TR AA1L4M
OR	405 001 0408	TR RN1204
Q3102	405 000 2205	TR DTA144ES
OR	405 078 2107	TR BN1L4M
OR	405 103 9705	TR AN1L4M
OR	405 001 1306	TR RN2204
Q3103	405 000 6104	TR DTC144ES
OR	405 078 3005	TR BA1L4M
OR	405 103 9606	TR AA1L4M
OR	405 001 0408	TR RN1204
Q3104	405 075 8409	TR DTC144TS
OR	405 105 7204	TR BA1L4Z
Q3105	405 000 6104	TR DTC144ES
OR	405 078 3005	TR BA1L4M
OR	405 103 9606	TR AA1L4M
OR	405 001 0408	TR RN1204
Q3106	405 000 6104	TR DTC144ES
OR	405 078 3005	TR BA1L4M
OR	405 103 9606	TR AA1L4M
OR	405 001 0408	TR RN1204
Q3107	405 000 2205	TR DTA144ES
OR	405 078 2107	TR BN1L4M
OR	405 103 9705	TR AN1L4M
OR	405 001 1306	TR RN2204
Q3108	405 000 6104	TR DTC144ES
OR	405 078 3005	TR BA1L4M
OR	405 103 9606	TR AA1L4M
OR	405 001 0408	TR RN1204
Q3109	405 075 8409	TR DTC144TS
OR	405 105 7204	TR BA1L4Z
Q3160	405 000 6104	TR DTC144ES
OR	405 078 3005	TR BA1L4M
OR	405 103 9606	TR AA1L4M

PARTS LIST

REF.NO.	PART NO.	DESCRIPTION
Q3160	405 001 0408	TR RN1204
Q3161	405 000 2205	TR DTA144ES
OR	405 078 2107	TR BN1L4M
OR	405 103 9705	TR AN1L4M
OR	405 001 1306	TR RN2204
Q3300	405 012 2002	TR 2SC1815-GR
OR	405 020 7204	TR 2SC945A-K
OR	405 011 7503	TR 2SC1740-S
Q3301	405 011 1907	TR 2SC1627-Y
Q3302	405 001 7001	TR 2SA1015-GR
OR	405 005 2002	TR 2SA733-P
Q3303	405 012 2002	TR 2SC1815-GR
OR	405 020 7204	TR 2SC945A-K
OR	405 011 8609	TR 2SC1740S-S
Q3730	405 012 2002	TR 2SC1815-GR
OR	405 020 7204	TR 2SC945A-K
OR	405 011 8609	TR 2SC1740S-S
Q3830	405 012 2002	TR 2SC1815-GR
OR	405 020 7204	TR 2SC945A-K
OR	405 011 8609	TR 2SC1740S-S
SVR30	614 003 6190	SEMI-FIXED V.R.20K(B)
SVR31	614 003 6190	SEMI-FIXED V.R.20K(B)
SVR32	614 003 6190	SEMI-FIXED V.R.20K(B)
SVR33	614 003 6190	SEMI-FIXED V.R.20K(B)
SVR34	614 003 6183	SEMI-FIXED V.R.10K(B)
SVR35	614 003 6183	SEMI-FIXED V.R.10K(B)
SVR36	614 003 6213	SEMI-FIXED V.R.50K(B)
SVR37	614 003 6213	SEMI-FIXED V.R.50K(B)

CD MAIN P.C.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
78	614 236 0545	ASSY.PCB.CD MAIN
C1603	403 043 3100	ELECT 2200U M 16V
C1604	403 042 6205	ELECT 1000U M 16V
CN101	614 017 2577	PLUG.6P,PICK SENSOR
CN102	614 228 0911	PLUG.8P,PICK ACTUATOR
CN103	614 017 2553	PLUG.4P,SLED/SPINDLE MOTOR
CN104	614 017 2546	PLUG.3P,MECHA SW
CN105	614 017 2546	PLUG.3P,AC GND AC
CN106	614 017 2546	PLUG.3P,LINE OUT
CN107	614 208 2355	SOCKET.8P(B TO B).TO CD FRONT
CN108	614 208 2362	SOCKET.9P(B TO B).TO CD FRONT
CN109	614 017 2560	PLUG.5P,TO TUN/PRE-AMP
CN110	614 016 3865	PLUG.4P,TP1-4
D102	407 003 4507	DIODE DAP202K
D103	407 003 4507	DIODE DAP202K
D111	△407 004 9105	DIODE DSF10C
OR	△407 012 3300	DIODE 1SR35-200A
D112	△407 004 9105	DIODE DSF10C
OR	△407 012 3300	DIODE 1SR35-200A
D113	△407 004 9105	DIODE DSF10C
OR	△407 012 3300	DIODE 1SR35-200A
D114	△407 004 9105	DIODE DSF10C
OR	△407 012 3300	DIODE 1SR35-200A
D131	407 003 4507	DIODE DAP202K
IC101	409 245 4802	IC LA9210M.SSP
IC102	△409 018 5500	IC LA6510.PICK ACT DRV
IC103	△409 018 5500	IC LA6510.MOTOR DRV
IC104	409 248 8708	IC LC7866E.DSP
IC105	409 206 9006	IC LC97000P-288.8FS.18BIT DAC
IC106	409 241 5506	IC XRA15218F.AUDIO BUFFER
IC107	410 122 3504	IC CXP5046H-259S.MPU
IC108	△409 195 4105	IC M5294P.REGURETOR
L1701	△614 028 4256	FILTER,FOR LED
Q101	405 002 0308	TR 2SA1037K-R
Q102	405 014 4509	TR 2SC2412K-R

PARTS LIST (TAPE MECHANISM)

TAPE DECK MECHANISM(TM-SF3J/SP)

REF.NO.	PART NO.	DESCRIPTION
M1	614 219 9657	ASSY.CHASSIS,DECK MECHANISM
M2	614 195 9139	SPRING PLATE,CASSETTE PRESSURE
M3	614 219 9671	ASSY.FLYWHEEL,REV
M4	614 219 9688	ASSY.FLYWHEEL,NOR
M5	412 034 4709	SPECIAL WASHER,REV FW FIX
M6	412 014 3005	SPECIAL WASHER,NOR FW FIX
M7	412 029 8200	SPECIAL WASHER,REV OIL PROOF
M8	412 012 7005	SPECIAL WASHER,NOR OIL PROOF
M9	614 219 9596	COMMUTATE MOTOR ASSY,MECHA DRIVE
M10	614 223 8677	BRACKET-E,MOTOR
M11	614 219 9954	BELT,SQUARE,A-MECHA DRIV
M12	614 219 9961	BELT,SQUARE,B-MECHA DRIV
M13	614 195 8644	PULLEY,DUMMY
M14	412 022 0607	SPECIAL WASHER,D.PULLEY FIX
M15	614 220 0001	LEVER,PLAY GR
M16	614 220 1657	ASSY.GEAR,PLAY CLUTCH
M17	614 220 0261	PIPE,PLAY SLIP FIX
M18	614 224 5293	CUSHION,BELT TUTCH(B)
M19	614 224 5309	CUSHION,BELT TUTCH(A)
M20	614 236 5397	SPRING,TENS,PLAY LEVER RESET
M21	614 219 9817	GEAR,RELAY FIXED
M22	614 220 0261	PIPE,GEAR FIX
M23	614 220 1664	ASSY.GEAR,TAKE UP MOVE
M24	614 220 0025	LEVER,TAKE UP MOVE B
M25	614 220 1268	SPRING,WIRE,B MECH REEL CH CLIC
M26	614 219 9848	GEAR,REEL RELAY
M27	614 219 9831	GEAR,REEL
M28	614 219 9886	REEL,RIGHT
M29	614 219 9893	REEL,LEFT
M30	614 220 1251	SPRING,COMP,BACK TENS LEFT REEL
M31	614 219 9695	ASSY,LEVER,PINCH LEFT
M32	614 219 9701	ASSY,LEVER,PINCH RIGHT
M33	614 229 7520	SPRING,WIRE,PINCH LEFT
M34	614 220 1275	SPRING,WIRE,PINCH RIGHT
M35	614 220 0070	LEVER,BRAKE R
M36	614 220 0087	LEVER,BRAKE L
M37	614 220 0162	SLIDE,DOOR LOCK A
M38	614 220 0179	SLIDE,DOOR LOCK B
M39	614 220 0247	SLIDE,EJECT RELAY A
M40	614 220 0254	SLIDE,EJECT RELAY B
M41	614 220 1190	SPRING,TENS,EJ RELAY RESET
M42	614 220 0339	MAGNETIC COIL,CAM GEAR TRIGGER
M43	614 220 1626	ASSY.PCB,MECHA
M44	614 219 9770	SHIELD,HEAD PCB
M45	614 222 8968	PCB,P.MECHA HEAD LEAD RELAY
M46	614 222 8975	PCB,P.MECHA HEAD LEAD RELAY
M47	614 220 0148	LEVER,D.SLIDE LOCK
M48	614 220 1312	SPRING,WIRE,LOCK LEVER RESET
M49	614 232 5414	LEVER,HEAD SLIDE UP A
M50	614 220 0131	LEVER,HEAD SLIDE UP B
M51	614 220 1688	ASSY.SLIDE,HEAD
M52	614 220 1329	SPRING,WIRE,HEAD SLIDE RESET
M53	614 220 1183	SPRING,TENS,HEAD SLIDE CONT
M54	614 219 9763	GUIDE,TAPE
M55	614 220 1633	ASSY.BRACKET-E,HEAD LOCATE
M56	614 220 0292	HEAD,REC/PLAY
M57	614 220 0308	HEAD,PLAY
M58	614 220 4900	GEAR,HEAD ROTARY
M59	412 012 7609	SPECIAL WASHER,HEAD THRUST FIX
M60	614 220 0063	LEVER,SECTOR
M61	614 220 1336	SPRING,WIRE,HEAD CLIC
M62	614 226 5543	SPRING,COMP,AZIMUTH COIL
M63	412 031 2005	SPECIAL SCREW,AZIMUTH BISS
M64	614 221 8235	SPRING,WIRE,H.S.EARTH
M65	614 219 9992	LEVER,R/F A
M66	614 220 0032	LEVER,R/F B
M67	614 219 9855	GEAR,R/F MOVE
M68	614 220 0261	PIPE,R/F MOVE GEAR FIX

REF.NO.	PART NO.	DESCRIPTION
M69	614 219 9879	GEAR,D.CAM
M70	614 220 0049	LEVER,MAIN TRIGGER
M71	614 220 0056	LEVER,SUB TRIGGER
M72	614 223 8745	SLIDE,DRIVE
M73	614 220 1299	SPRING,WIRE,D.SLIDE RESET
M74	614 220 0186	SLIDE,A/B MECHA CHANGE
M75	614 229 7506	SPRING,TENS,MECHA CH SLIDE
M76	614 229 7513	SPRING,TENS,TRIGGER INNER FORCE
M77	614 219 9718	ASSY.SLIDE,HEAD CH
M78	614 220 1305	SPRING,WIRE,CH RESET
M79	614 220 0209	SLIDE,REEL CH NO.1
M80	614 219 9725	ASSY.SLIDE,REEL CH NO.2
M81	614 220 0346	SWITCH,LEAF,PACK1,S003
OR	614 220 0346	SWITCH,LEAF,PACK2,S004
OR	614 220 0346	SWITCH,LEAF,CROM1,S005
OR	614 220 0346	SWITCH,LEAF,CROM2,S006
OR	614 220 0346	SWITCH,LEAF,URFWD,S007
OR	614 220 0346	SWITCH,LEAF,URREV,S008
M82	614 225 6916	CUSHION,RUBBER,SILEN
M83	614 226 6854	CUSHION,RF LEVER TOUTCH
M84	614 229 1313	CUSHION,RUBBER,DRIVE SLIDE WIRE STOPPER
M85	614 228 5053	CUSHION,RUBBER,H.S. STOPPER

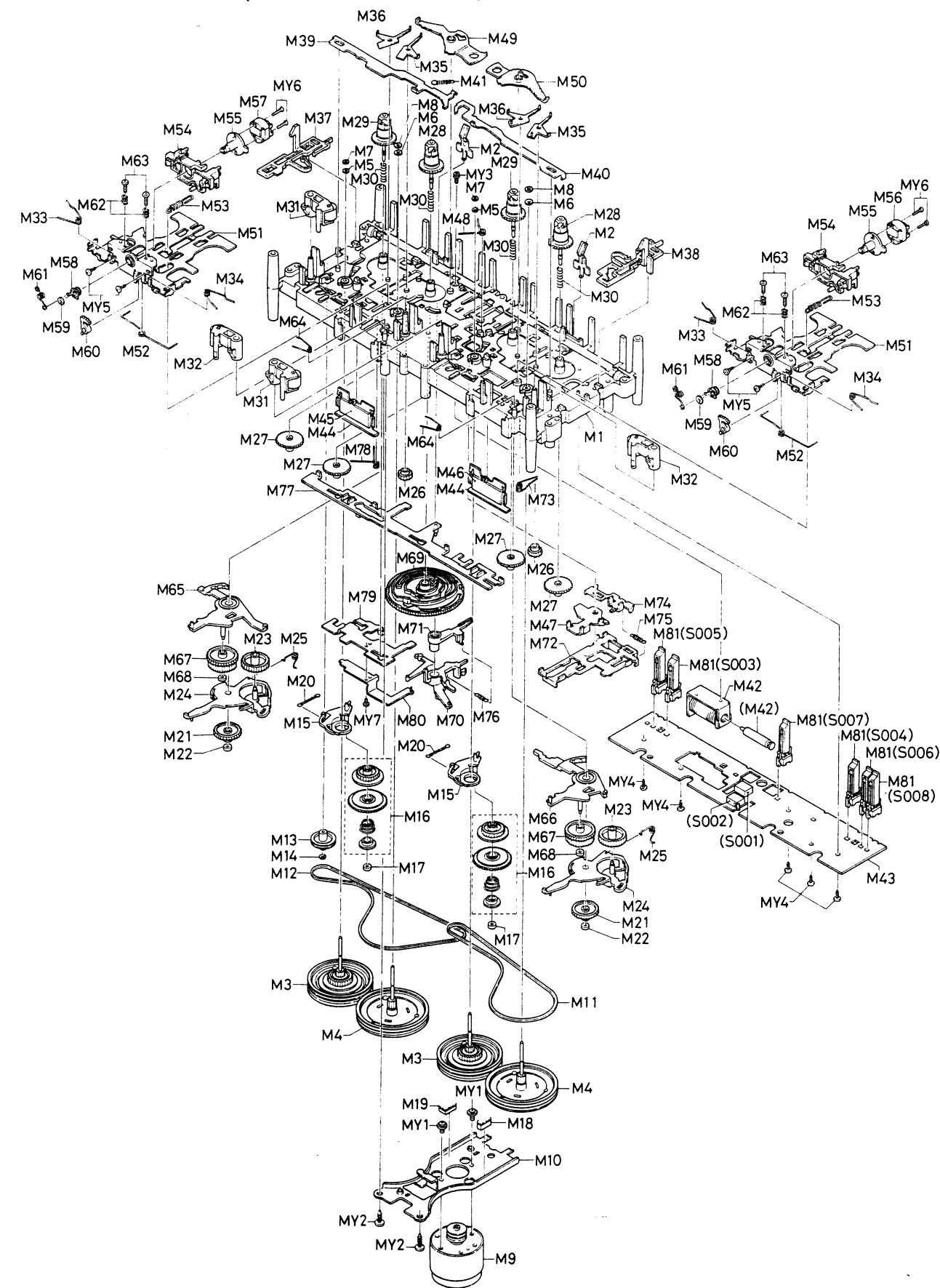
FIXING PARTS(TAPE DECK MECHANISM)

REF.NO.	PART NO.	DESCRIPTION
MY1	411 102 6300	SCR PAN-FLG 2.6X2.8.MOTOR FIX
MY2	411 021 6405	SCR S-TPG B1N 3X8,B-MOTOR FIX
MY3	411 044 7205	SCR PAN+SW 2X4.SOLENOID FIX
MY4	411 021 0809	SCR S-TPG B1N 2X6
MY5	411 022 7807	SCR S-TPG PAN 2X6.TAPE GUIDE FIX
MY6	411 124 9204	SCR PAN PCS 1.6X6.HEAD FIX
MY7	411 018 6401	SCR PAN PCS 2X2.REEL CH SLIDE NO.2 ASSY

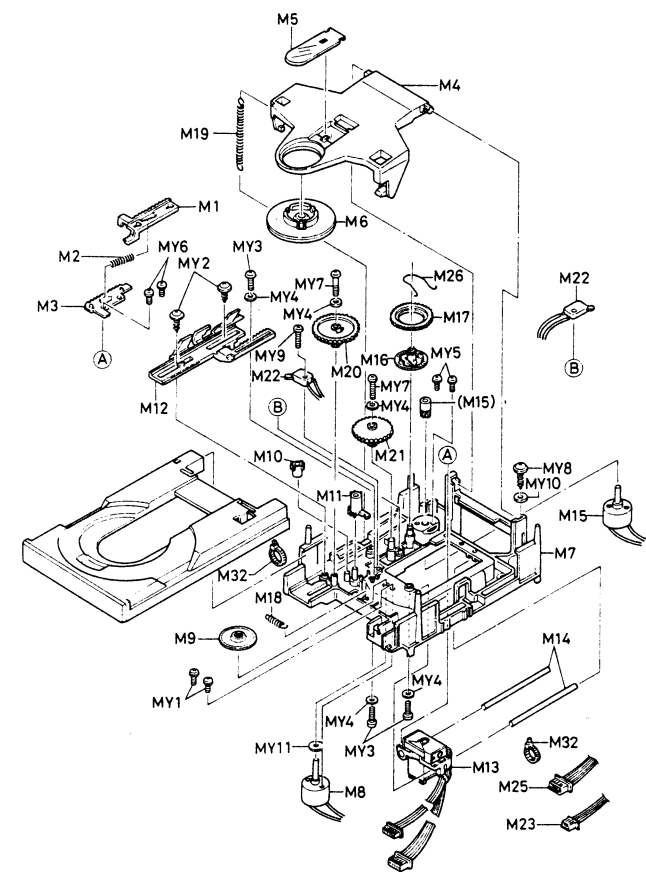
TAPE MECHANISM P.C.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
43	614 220 1626	ASSY.PCB,MECHANISM M43
CN001	614 017 3871	PLUG.8P,TAPE A
CN002	614 235 3646	PLUG.8P,TAPE B
CN003	614 035 4935	SOCKET,4P,TO MOTOR
D001	407 004 9105	DIODE DSF10C
OR	407 012 3300	DIODE 1SR35-200A
D002	407 007 9904	DIODE GMA01
OR	407 012 4406	DIODE 1SS133
D003	407 053 6308	ZENER DIODE MTZ5.1B
OR	407 051 6706	ZENER DIODE GZS5.1Y
ICP001	614 205 2884	IC PROTECTOR ICP-N10
PH001	407 131 9900	PHOTO COUPLE SPI-335-34-C
PH002	407 131 9900	PHOTO COUPLE SPI-335-34-C
Q001	△405 099 0908	TR 2SB621-S
Q002	405 006 1905	TR 2SA933S
OR	405 002 1107	TR 2SA1048-GR
Q003	△405 099 0908	TR 2SB621-S
S001	614 224 2575	SWITCH,LEVER,PLAY
S002	614 224 2575	SWITCH,LEVER,STOP
SVR001	614 003 6190	SEMI-FIXED V.R.20K(B)

EXPLODED VIEW (TAPE MECHANISM)



EXPLODED VIEW & PARTS LIST (CD MECHANISM)



CD MECHANISM(PM-DAD S6N/SP)

REF.NO.	PART NO.	DESCRIPTION
M1	614 216 9766	GEAR,P.U RACK UPPER
M2	614 216 9896	SPRING,COMP,RACK BACK

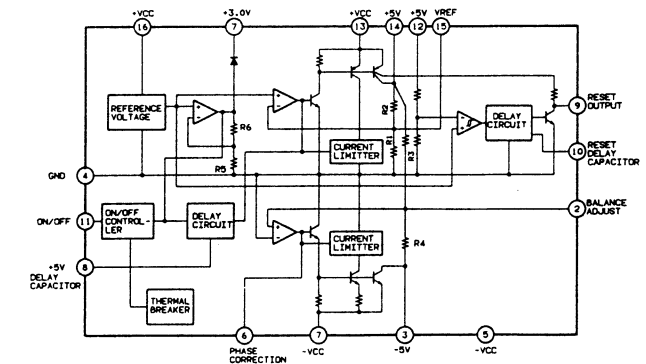
REF.NO.	PART NO.	DESCRIPTION
M3	614 216 9759	GEAR,P.U RACK LOWER
M4	614 216 9858	LEVER,CHUCK
M5	614 211 6654	SPRING PLATE,CHUCK
M6	614 219 0104	ASSY,PULLEY,CHUCK
M7	614 216 9728	CHASSIS,CD MECHA
M8	614 045 2105	COMMUTATE MOTOR,SPINDLE
M9	614 216 9841	TURN TABLE
M10	614 216 9742	GEAR,CHANGE SLIDE
M11	614 216 9810	GEAR,CHANGE RACK
M12	614 216 9865	SLIDE,DRIVING
M13	614 227 9069	PICKUP,LASER
M14	614 230 0411	SHAFT,PICK UP GUIDE
OR	614 145 9622	SHAFT,PICK UP GUIDE
M15	614 217 7068	COMMUTATE MOTOR ASSY,SLED
M16	614 216 9797	GEAR,CLUTCH INNER
M17	614 216 9780	GEAR,CLUTCH OUTER
M18	614 216 9889	SPRING,TENS,SLIDE BACK
M19	614 223 2217	SPRING,TENS,CHUCK LEVER BACK
M20	614 216 9773	GEAR,TRAY SLED
M21	614 216 9803	GEAR,P.U SLED
M22	614 018 9223	SWITCH,LOAD OUT & LIMIT
M23	614 224 3138	ASSY,CONNECTOR-S.3P,SWITCH LEAD
M25	614 224 3145	ASSY,CONNECTOR-S.4P,SWITCH LEAD
M26	614 216 9902	SPRING,WIRE,CLUTCH
M32	614 129 4971	FIXER,LEAD FIX

FIXING PARTS(CD MECHANISM)

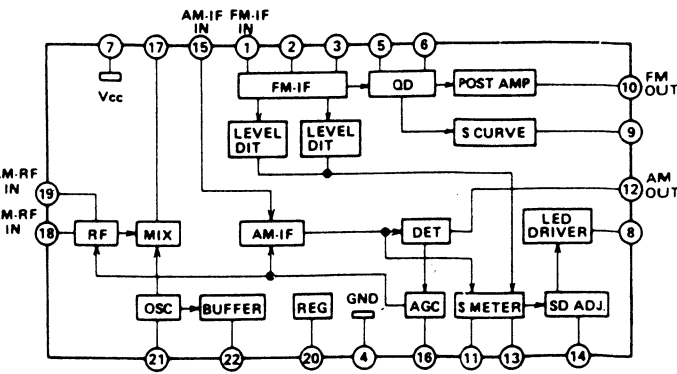
REF.NO.	PART NO.	DESCRIPTION
MY1	411 044 7205	SCR PAN+SW 2X4
MY2	411 020 9902	SCR S-TPG BRZ+FLG 3X8
MY3	411 022 8408	SCR S-TPG PAN 2X8
MY4	411 087 4704	WASHER V 2X6X0.4
MY5	411 044 7205	SCR PAN+SW 2X4
MY6	411 044 7502	SCR PAN+SW 2X5
MY7	411 119 8908	SCR S-TPG PAN 2X14
MY8	411 020 9100	SCR S-TPG BRZ+FLG 3X12,LEVER FIX
MY9	411 104 4205	SCR TPG PAN PCS 1.7X8
MY10	411 092 2900	WASHER Z 3X10X1
MY11	412 032 0208	SPECIAL WASHER,ADHESIVE ESCAPE STOP

IC BLOCK DIAGRAM

IC107 M5294P (5-Terminal Voltage Regulator with System-Reset & Muting)



IC201 LA1265S (AM-RF & FM-AM-IF System)

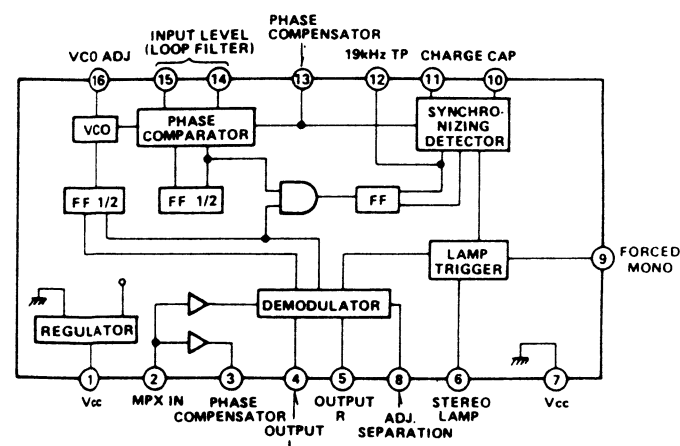


IC104 Pin Function of LC7866E (Digital Signal Processor & Servo Control)

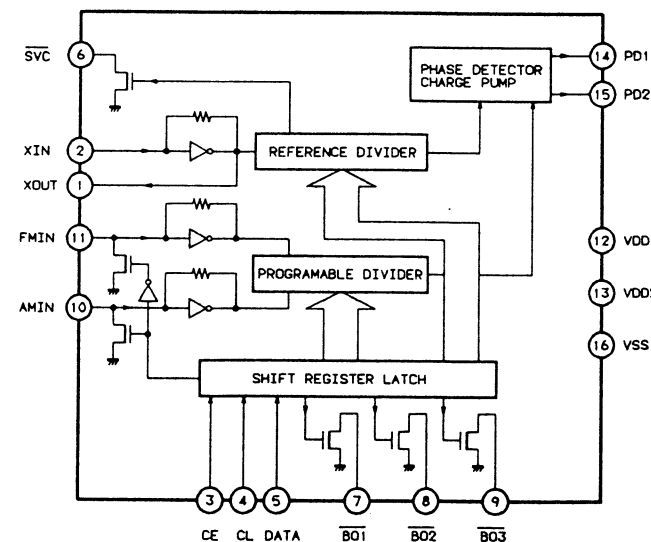
No	Pin Name	I / O	Description
1	TEST1	I	For TEST. Normal time is non connection.
2	AO	O	Input from VCO output in LA9210.(8.6436MHz) Phase comparison output of VCO and EFM signal.
3	AI	I	
4	PDO	O	
5	VSS		GND
6	EFMO	O	Negative output through amplitude limiter. Antiphase of EFMO. This signal use SLICE LEVEL CONTROL.
7	EFMO	O	Positive output through amplitude limiter. Antiphase of EFMO. This signal use SLICE LEVEL CONTROL.
8	EFMIN	I	Inputting HF signal of 1~2Vp.p. This signal use SLICE LEVEL CONTROL.
9	TEST2	I	For TEST. Normal time is non connection.
10	CLV +	O	Output for DISC MOTOR CONTROL.
11	CLV-	O	Output for DISC MOTOR CONTROL.
12	V / P	O	CLV rough Servo time : Output "H" Phase control time : Output"L"
13	FOCS	O	Output "H" : Lens pull up with slowly than stop the Focus
14	FST	O	Servo. If FZD generate, it reset output of FOCS. For lead-in of
15	FZD	I	Focus
16	HFL	I	Comply with command of track jump, it oscillate kick Pulse, JP + & JP-. It jump the prescribed number of track (1,4,16,64).
17	TES	I	Comply with command of track jump, it oscillate kick Pulse, JP + & JP-. It jump the prescribed number of track (1,4,16,64).
18	PCK	O	PCK Monitor(4.3218MHz)
19	FSEQ	O	SYNC (FS of truth) detected from EFM signal = SYNC of counter : "H" (Latch Output during in 1 frame)
20	TOFF	O	Comply with command of track jump, it oscillate kick Pulse, JP + & JP-. It jump the prescribed number of track (1,4,16,64).
21	TGL	O	
22	THLD	O	
23	TEST3	I	For TEST. Normal time is non connection.
24	VDD		+5V
25	JP +	O	Comply with command of track jump, it oscillate kick Pulse, JP + & JP-. It jump the prescribed number of track (1,4,16,64).
26	JP-	O	
27	DEMO	I	For adjustment of production process. Sound on function.
28	TEST4	I	For TEST. Normal time is non connection.
29	EMPH	O	Output is "H" time, it need de-emphasis
30	TESTA	I	For TEST. Normal time is "H".

No	Pin Name	I / O	Description
31	SMP2	O	Output of signal to DAC, Signal of Latch & L/R select, Signal for Sampling Hold
32	SMP1	O	Output of signal to DAC, Signal of Latch & L/R select, Signal for Sampling Hold
33	LRCLK	O	Output of signal to DAC, Signal of Latch & L/R select, Signal for Sampling Hold
34	SMP	O	Output of signal to DAC, Signal of Latch & L/R select, Signal for Sampling Hold
35	DFOUT	O	Output of signal to DAC, Signal of Latch & L/R select, Signal for Sampling Hold
36	DACLK	O	Output of signal to DAC, Signal of Latch & L/R select, Signal for Sampling Hold
37	TESTB	O	For TEST. Normal time is non connection.
38	TESTC	O	For TEST. Normal time is non connection.
39	CK2	O	For output of signal that Comply with CD-ROM
40	ROMOUT	O	For output of signal that Comply with CD-ROM
41	C2FLCK	O	For output of signal that Comply with CD-ROM
42	C2F	O	For output of signal that Comply with CD-ROM
43	DOUT	O	Output of DIGITAL OUT
44	SBSY	O	Synchronizing signal of sub-code block.
45	EFLG	O	For correction monitor of C1, C2, single, double.
46	PW	O	SFSY is Synchronizing signal of sub-code & frame. Clock of eighth send to SBCK then read out the sub-code of P, Q, R, S, T, U, V, & W.
47	SFSY	O	
48	SBCK	I	
49	FSX	O	Output of Synchronizing signal (7.35KHz)
50	WRQ	O	Data sub-code Q pass the CRC check then WRQ do "H". It detect at external, Data read out from SQOUT by send the CQCK. RWC set the "H" by Micro Processor then it let command by send with Synchronizing CQCK command data.
51	RWC	I	
52	SQOUT	O	
53	COIN	I	
54	CQCK	I	
55	RES	I	Turn on the Power Supply time : Once "L"
56	M/L	I	Data of SQOUT want at the LBS first time : M/L set the "L".
57	LASER	O	This output can control at Serial Control from Micro Processor
58	16M	O	16M Output (16.9344MHz)
59	4M	O	4M Output (4.2336MHz)
60	CONT	O	This output can control at Serial Control from Micro Processor
61	TESTS	I	For TEST. Normal time is non connection.
62	CS	I	Chip select Terminal. This terminal "L" : LC7866 is active (Internal Resistor : Pull Down)
63	XIN	I	Connection Terminal of crystal oscillation (16.9344MHz)
64	XOUT	O	Connection Terminal of crystal oscillation (16.9344MHz)

IC202 LA3361 (PLL FM MPX. Stereo Demodulator)



IC203 LM7001 (Pre-Scaler)



IC BLOCK DIAGRAM

IC105 Pin Function of LC97000-288 (D / A Converter)

No	Pin Name	I / O	Description
1	L-CH	O	DAC CH-1 Output pin.
2	VRH	R	Reference voltage "H" input pin.
3	AVDD	P	Analog system power supply pin.
4	DVDD	P	Digital system power supply pin.
5	BCLK	I	Bit clock pin.
6	DATA	I	Digital audio data input pin. Input in bit serial from MSB.
7	LRCK	I	LR Clock input pin. LRCK = "H" CH1 LRCK = "L" CH2
8	TEST	I	Test pin (Normally "L").
9	ATT	I	Attenuation data input pin. Input in bit serial from LSB.
10	SHIFT	I	Attenuation data shift clock input pin.
11	LATCH	I	Attenuation data latch clock input pin.
12	INITB	I	Initializing signal input pin (Normally "H").
13	TEST	I	Test pin (Normally "L").
14	EMPH2	I	De-emphasis set pin.

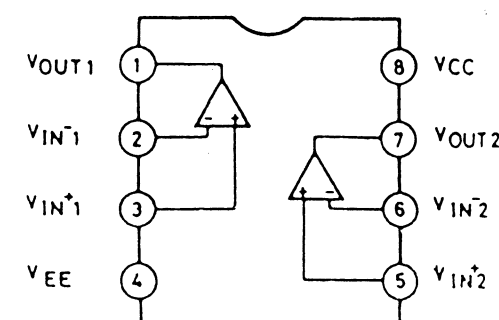
No	Pin Name	I / O	Description
15	EMPH1	I	De-emphasis set pin.
16	D / N	I	Normal / Double speed switch pin.
17	SOC2	I	Input source select pin.
18	SOC1	I	Input source select pin.
19	MODE	I	Operation set pin.
20	TEST	I	Test pin (Normally "L").
21	TEST	I	Test pin (Normally "L").
22	DGND	P	Digital system ground pin.
23	CLKOUT	O	Clock output pin .. At 392Fs : 1 / 2 XOUT At 384Fs, 448Fs, 512Fs : 1 / 4 XOUT
24	XIN	I	Crystal oscillation input pin.
25	XOUT	O	Crystal oscillation output pin.
26	AGND	P	Analog system ground pin.
27	VRL	R	Reference voltage "L" input pin.
28	R-CH	O	DAC CH-2 Output pin.

IC108 Pin Function of CXP5046H-259 (Micro Processor)

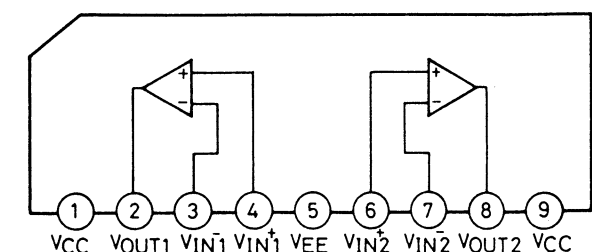
No	Pin Name	I / O	Description
1	IR(INT)	I	Remocon signal
2	IR	I	Remocon signal
3	REC SW	I	REC (TAPE DECK) signal (ON / OFF)
4	DIR SW	I	Tape Direction (TAPE DECK) signal (A / B)
5	SYNC	O	Synchronous REC signal (Auto Function output)
6	NC		Non used
7	NC		Non used
8	NC		Non used
9	NC		Non used
10	SCAN0	O	Scan signal for key & display
11	SCAN1	O	Scan signal for key & display
12	SCAN2	O	Scan signal for key & display
13	SCAN3	O	Scan signal for key & display
14	KEY0	I	Key signal
15	KEY1	I	Key signal
16	KEY2	I	Key signal
17	KEY3	I	Key signal
18	SEGF	O	Segment signal for LED display
19	SEGA	O	Segment signal for LED display
20	SEGB	O	Segment signal for LED display
21	SEGG	O	Segment signal for LED display
22	SEGH	O	Segment signal for LED display
23	SEGC	O	Segment signal for LED display
24	SEGD	O	Segment signal for LED display
25	SEGE	O	Segment signal for LED display
26	NC		Non used
27	NC		Non used
28	NC		Non used
29	NC		Non used
30	CLV G	O	Select signal of CLV gain
31	NC		Non used
32	VSS		GND

No	Pin Name	I / O	Description
33	LDON	O	Laser ON / OFF signal
34	CLOSE	O	Tray action motor (SLED MOTOR) signal
35	OPEN	O	Tray action motor (SLED MOTOR) signal
36	XTAL	O	Clock oscillation signal
37	EXTAL	I	Clock oscillation signal
38	RST	I	Reset signal
39	CQCK	O	Clock signal to LC7866E
40	COIN	O	Command data signal to LC7866E
41	NC		Non used
42	SQOUT	I	SUBQ data signal from LC6866E
43	RWC	O	RWC signal to LC7866E
44	NC		Non used
45	WRQ	I	WRQ signal from LC7866E
46	DRF	I	DRF signal from LA9210M
47	NC		Non used
48	CMOPN	I	Open switch signal (ON / OFF)
49	LIMIT	I	Pick-up Limit switch signal (ON / OFF)
50	NC		Non used
51	NC		Non used
52	NC		Non used
53	NC		Non used
54	NC		Non used
55	NC		Non used
56	SL OP	O	Tray action motor (SLED MOTOR) signal
57	SL O	O	Tray action motor (SLED MOTOR) signal
58	NC		Non used
59	SL C	O	Tray action motor (SLED MOTOR) signal
60	NC		Non used
61	NC		Non used
62	NC		Non used
63	NC		Non used
64	Vdd		Power supply (+ 5V)

IC701-703 LA6458S (Dual Operational Amplifier)



IC751 LA6458D (Dual Operational Amplifier)



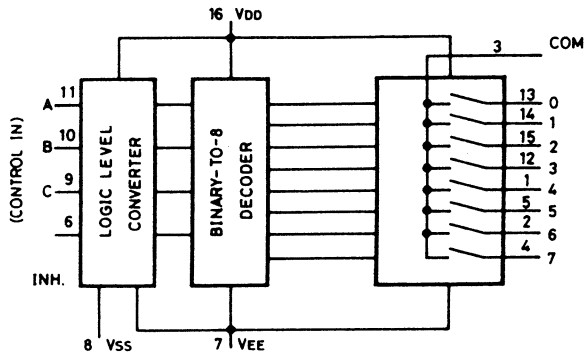
IC BLOCK DIAGRAM

IC702 · 802 BU4051B (8-Channel Multiplexer / De-Multiplexer)

TRUTH TABLE

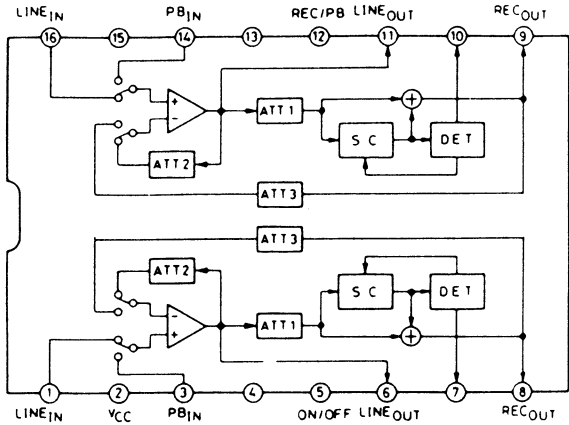
CONTROL INPUTS				"ON" CHANNEL		
INHIBIT	C ^Δ	B	A	TC4051BP	TC4052BP	TC4053BP
L	L	L	L	0	0X.0Y	0X.0Y.0Z
L	L	L	H	1	1X.0Y	1X.0Y.0Z
L	L	H	L	2	2X.2Y	0X.1Y.0Z
L	L	H	H	3	3X.3Y	1X.1Y.0Z
L	H	L	L	4	—	0X.0Y.1Z
L	H	L	H	5	—	1X.0Y.1Z
L	H	H	L	6	—	0X.1Y.1Z
L	H	H	H	7	—	1X.1Y.1Z
H	※	※	※	NONE	NONE	NONE

※ Don't care. Δ Except TC4052BP

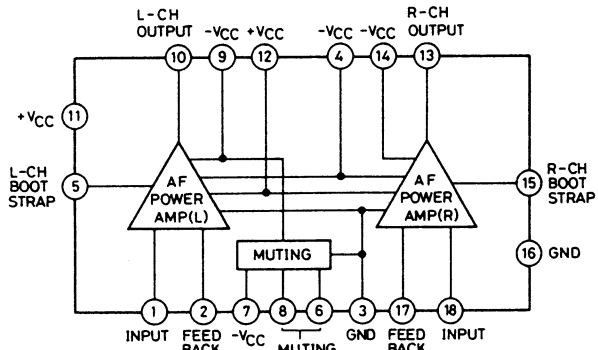


IC BLOCK DIAGRAM

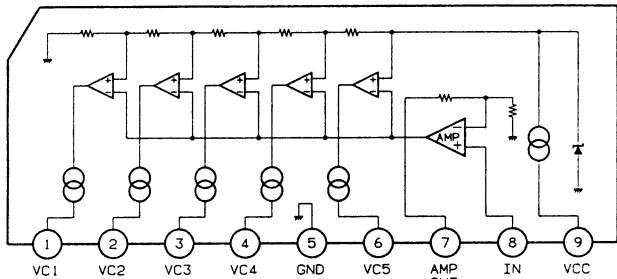
IC351 CXA1101P (Dolby B-Type Noise Reduction)



IC751 STK4132MK-2 (Power Amplifier)

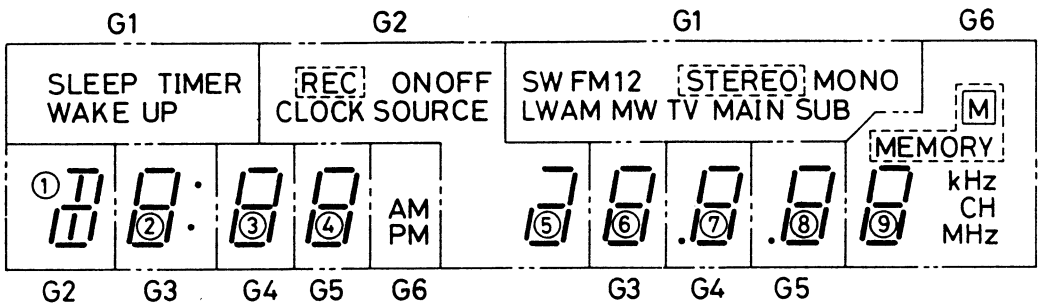


IC902 LB1433N (LED Level Meter Driver)

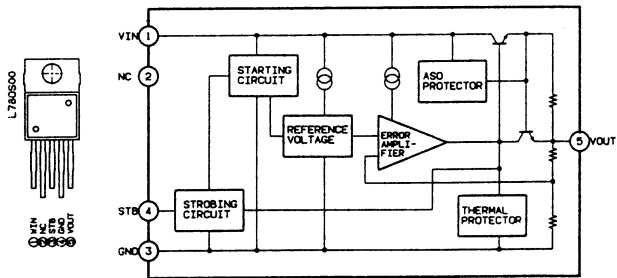


DISPLAY (LCD) PIN DESCRIPTION

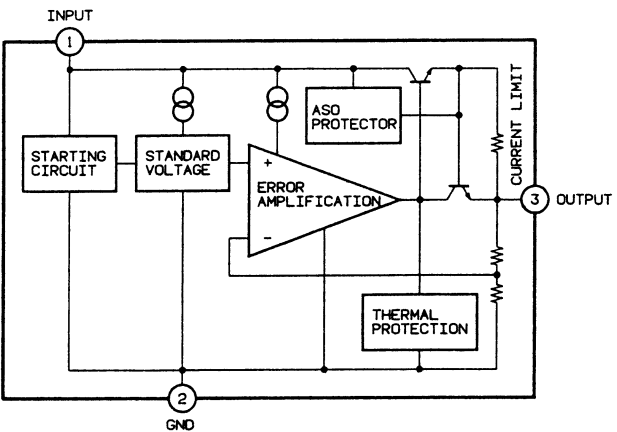
FL500 (Tuner Flurecent Display)



IC951 L780S12 (5-Terminal Voltage Regulator)



IC952 L7812F (3-Terminal Voltage Regulator)



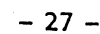
Segment Map

	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15
G1	AM	SUB	MW	TV	SW	FM	1	2	MAIN	LW	STEREO	MONO	TIMER	SLEEP	WAKEUP
G2	OFF	ON	REC	SOURCE	CLOCK	5b	5adeg	5c	1a	1b	1h	1g	1e	1c	1d
G3	6a	6b	6f	6g	6e	6c	6d	:	2a	2b	2f	2g	2e	2c	2d
G4	7a	7b	7f	7g	7e	7c	7d	.	3a	3b	3f	3g	3e	3c	3d
G5	8a	8b	8f	8g	8e	8c	8d	.	4a	4b	4f	4g	4e	4c	4d
G6	9a	9b	9f	9g	9e	9c	9d	MEMORY		M	AM	PM	kHz	CH	MHz

Pin Assignment

PIN No.	1	2	3	4	5	6	7	8	9	10	11	12	13
Segment Name	F	G6	G5	G4	G3	G2	G1	S15	S14	S13	S12	S11	S10
	14	15	16	17	18	19	20	21	22	23	24	25	
	S9	NC	NC	S1	S2	S3	S4	S5	S6	S7	S8	F	

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VOLTAGES OF IC (CD) (Unit : Volt)

IC101 LA9210M																
Measuring Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Stop Mode	0	-5.0	0	0	0	0	0	0	0	2.59	2.54	2.55	0	0	0	0
Play Mode	0	-5.0	Fluc	Fluc	Fluc	Fluc	Fluc	0	0	Fluc	Fluc	Fluc	Fluc	Fluc	Fluc	Fluc
Measuring Pin No.	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Stop Mode	0	0	0	0	Fluc	Fluc	0	0	0	0	Fluc	2.43	0	0	0	-5.0
Play Mode	Fluc	Fluc	Fluc	Fluc	Fluc	Fluc	Fluc	Fluc	0	Fluc	Fluc	Fluc	Fluc	Fluc	Fluc	-5.0
Measuring Pin No.	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Stop Mode	0	0	0	5.0	4.39	0	0	0	0	0	0	4.97	4.92	4.07	4.07	
Play Mode	Fluc	Fluc	Fluc	5.0	Fluc	Fluc	Fluc	Fluc	0	Fluc	Fluc	Fluc	Fluc	Fluc	Fluc	Fluc
Measuring Pin No.	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Stop Mode	4.07	0	0	0	2.52	2.49	2.50	5.0	2.51	2.51	2.54	3.92	2.60	2.33	4.92	0
Play Mode	Fluc	Fluc	Fluc	Fluc	Fluc	Fluc	Fluc	5.0	Fluc	Fluc	Fluc	Fluc	Fluc	Fluc	Fluc	0
Measuring Pin No.	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
Stop Mode	0	0.4	-0.4	0	-0.5	-0.5	0	-0.5	0	4.82	-4.97	4.83	5.0	0	0	0
Play Mode	0	Fluc	Fluc	Fluc	Fluc	Fluc	0	Fluc	Fluc	Fluc	Fluc	5.0	Fluc	Fluc	Fluc	0

IC102 LC6510											Fluc : Fluctuation
Measuring Pin No.	1	2	3	4	5	6	7	8	9	10	
Stop Mode	Fluc	Fluc	Fluc	Fluc	-9.65	Fluc	Fluc	Fluc	Fluc	8.60	
Play Mode	Fluc	Fluc	Fluc	Fluc	-9.65	Fluc	Fluc	Fluc	Fluc	8.60	

IC103 LC6510										
Measuring Pin No.	1	2	3	4	5	6	7	8	9	10
Stop Mode	0	0	0	0	-9.65	0	Fluc	Fluc	Fluc	8.60
Play Mode	Fluc	Fluc	0	0	-9.65	0	Fluc	Fluc	Fluc	8.60

IC104 LC7866E																
Measuring Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Stop Mode	0	2.31	2.34	2.51	0	2.46	2.48	2.52	0	0	0	4.92	0	2.51	4.07	4.07
Play Mode	Fluc	Fluc	Fluc	Fluc	0	Fluc	Fluc	Fluc	Fluc	Fluc	Fluc	Fluc	Fluc	Fluc	Fluc	Fluc
Measuring Pin No.	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Stop Mode	4.07	2.5	0	4.95	4.97	0	0	5.0	0	0	0	0	0	5.0	1.25	1.25
Play Mode	Fluc	Fluc	Fluc	Fluc	Fluc	Fluc	Fluc	5.0	Fluc	Fluc	Fluc	Fluc	Fluc	5.0	Fluc	Fluc
Measuring Pin No.	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Stop Mode	2.5	2.5	0	2.5	0	2.5	2.41	1.63	2.5	4.5	2.52	Fluc	2.28	0	2.5	0
Play Mode	Fluc	Fluc	Fluc	Fluc	Fluc	Fluc	Fluc	0(4.5)	Fluc	Fluc	Fluc	Fluc	Fluc	Fluc	Fluc	Fluc
Measuring Pin No.	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Stop Mode	2.5	Fluc	Fluc	Fluc	0	5.0	4.48	0	4.92	Fluc	2.33	4.93	0	0	2.28	2.47
Play Mode	Fluc	Fluc	Fluc	Fluc	0	5.0	Fluc	0	Fluc	Fluc	Fluc	Fluc	Fluc	0	Fluc	Fluc

IC105 LC97000P-288																
Measuring Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Stop Mode	2.06	4.02	5.0	5.0	2.5	0	2.5	0	0	0	0	4.93	0	0	0	0
Play Mode	Fluc	Fluc	Fluc	5.0	5.0	Fluc	Fluc	0	0	0	0	Fluc	0	0	Fluc	0
Measuring Pin No.	17	18	19	20	21	22	23	24	25	26	27	28				
Stop Mode	0	0	0	0	0	0	2.19	0.95	2.79	0	0	0				
Play Mode	0	0	0	0	0	0	Fluc	Fluc	Fluc	0	0	Fluc				

IC106 XRA15218F								
Measuring Pin No.	1	2	3	4	5	6	7	8
Stop Mode	2.05	2.05	0	-5.0	2.06	2.06	2.06	5.0
Play Mode	Fluc	Fluc	Fluc	-5.0	Fluc	Fluc	Fluc	5.0

IC107 M5294P																
Measuring Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Stop Mode	-9.65	0	-5.0	0	-9.65	-7.84	3.41	1.04	5.0	1.06	0.59	5.0	8.60	5.0	1.24	8.60
Play Mode	-9.65	Fluc	-5.0	0	-9.65	Fluc	Fluc	Fluc	5.0	Fluc	Fluc	5.0	8.60	5.0	Fluc	8.60

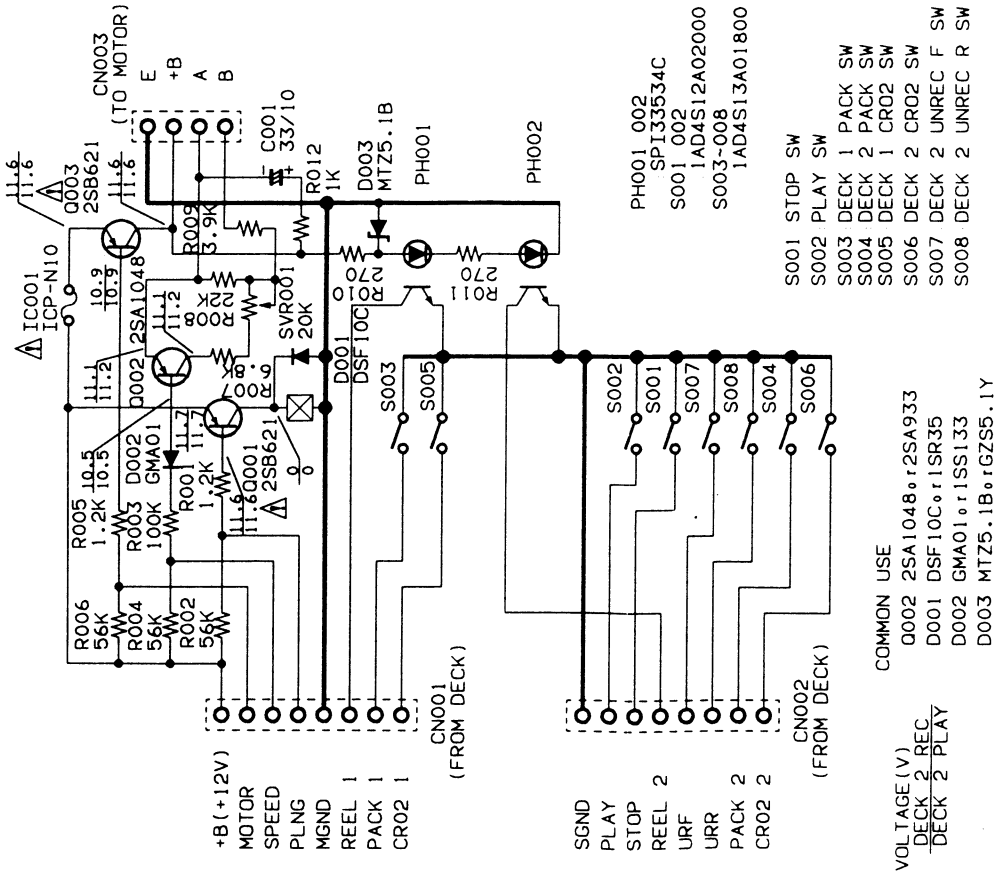
IC108 CXP5046-259																
Measuring Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Stop Mode	5.0	5.0	0	5.0	5.0	5.0	5.0	5.0	5.0	Fluc	Fluc	Fluc	5.0	5.0	5.0	5.0
Play Mode	5.0	5.0	0	5.0	5.0	5.0	5.0	5.0	5.0	Fluc	Fluc	Fluc	5.0	5.0	5.0	5.0
Measuring Pin No.	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Stop Mode	5.0	5.0	5.0	Fluc	5.0	Fluc	Fluc	5.0	5.0	0	0	0	0	0	0	0
Play Mode	5.0	5.0	5.0	Fluc	5.0	Fluc	Fluc	5.0	5.0	0	0	0	0	0	0	0
Measuring Pin No.	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Stop Mode	5.0	0	5.0	Fluc	Fluc	5.0	5.0	0	0	Fluc	Fluc	5.0	Fluc	4.2	5.0	5.0
Play Mode	0	5.0	0	Fluc	Fluc	5.0	5.0	0	0	Fluc	Fluc	5.0	Fluc	4.2	5.0	5.0
Measuring Pin No.	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Stop Mode	5.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0	0	0	0	0	0
Play Mode	5.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0	0	0	0	0	0

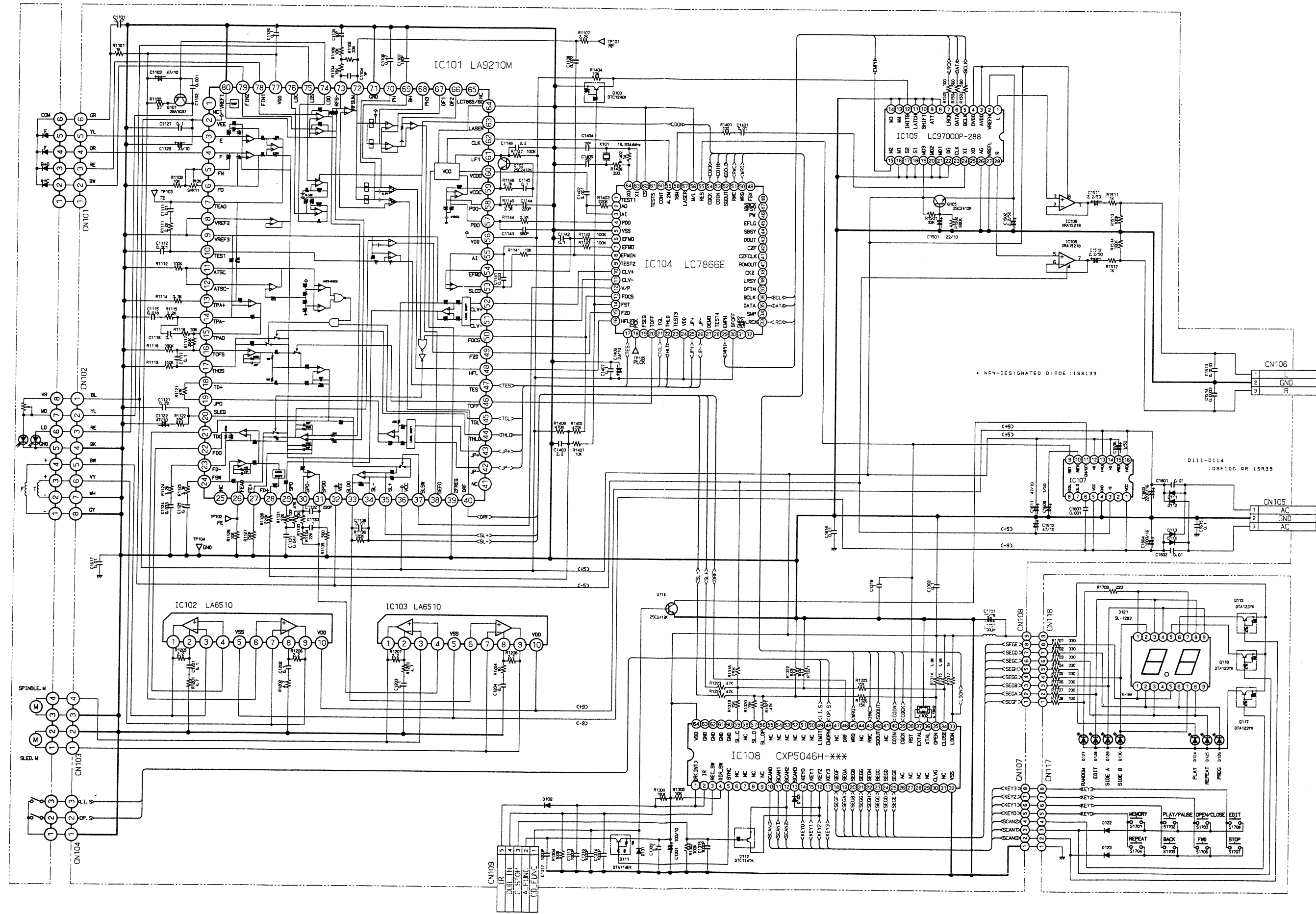
Pin 35 : Close Pin 36 : Open

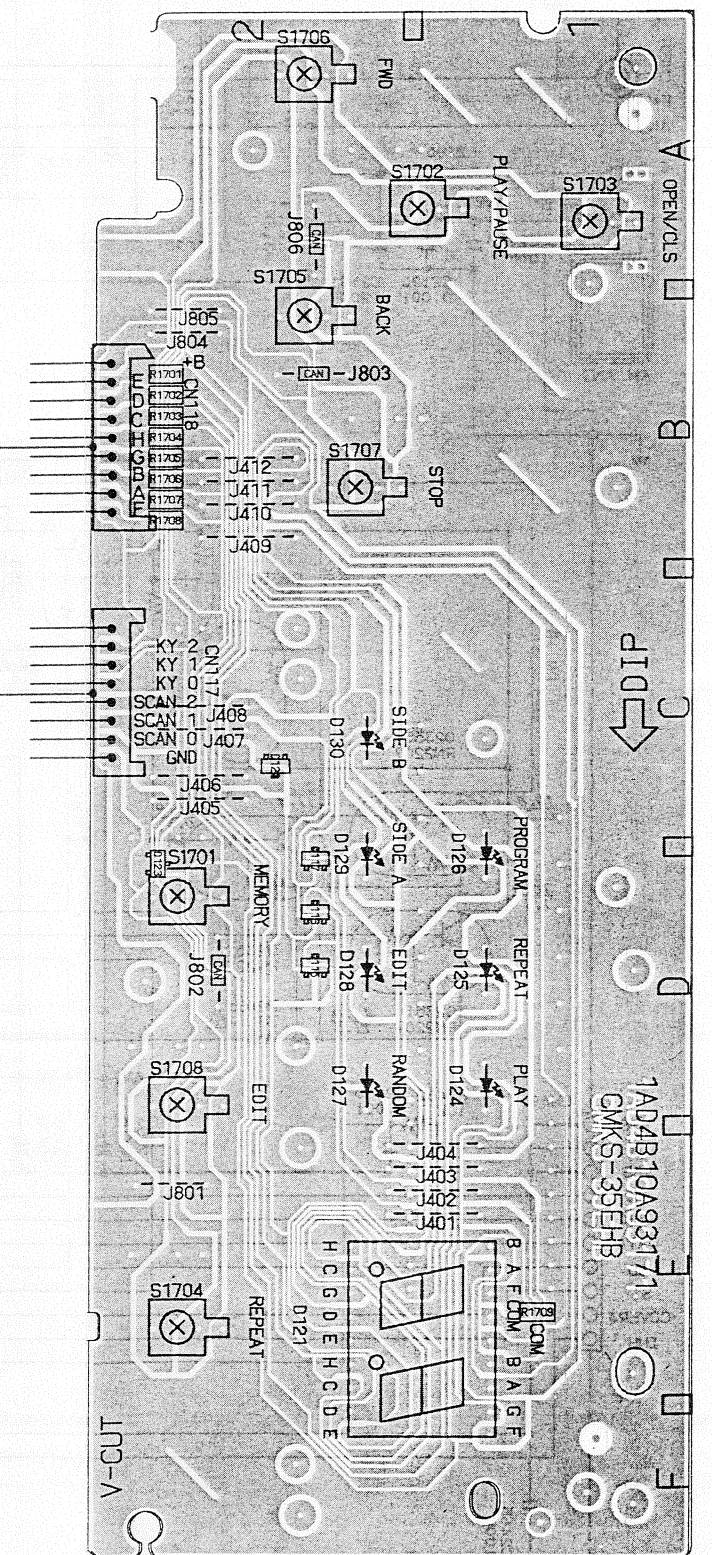
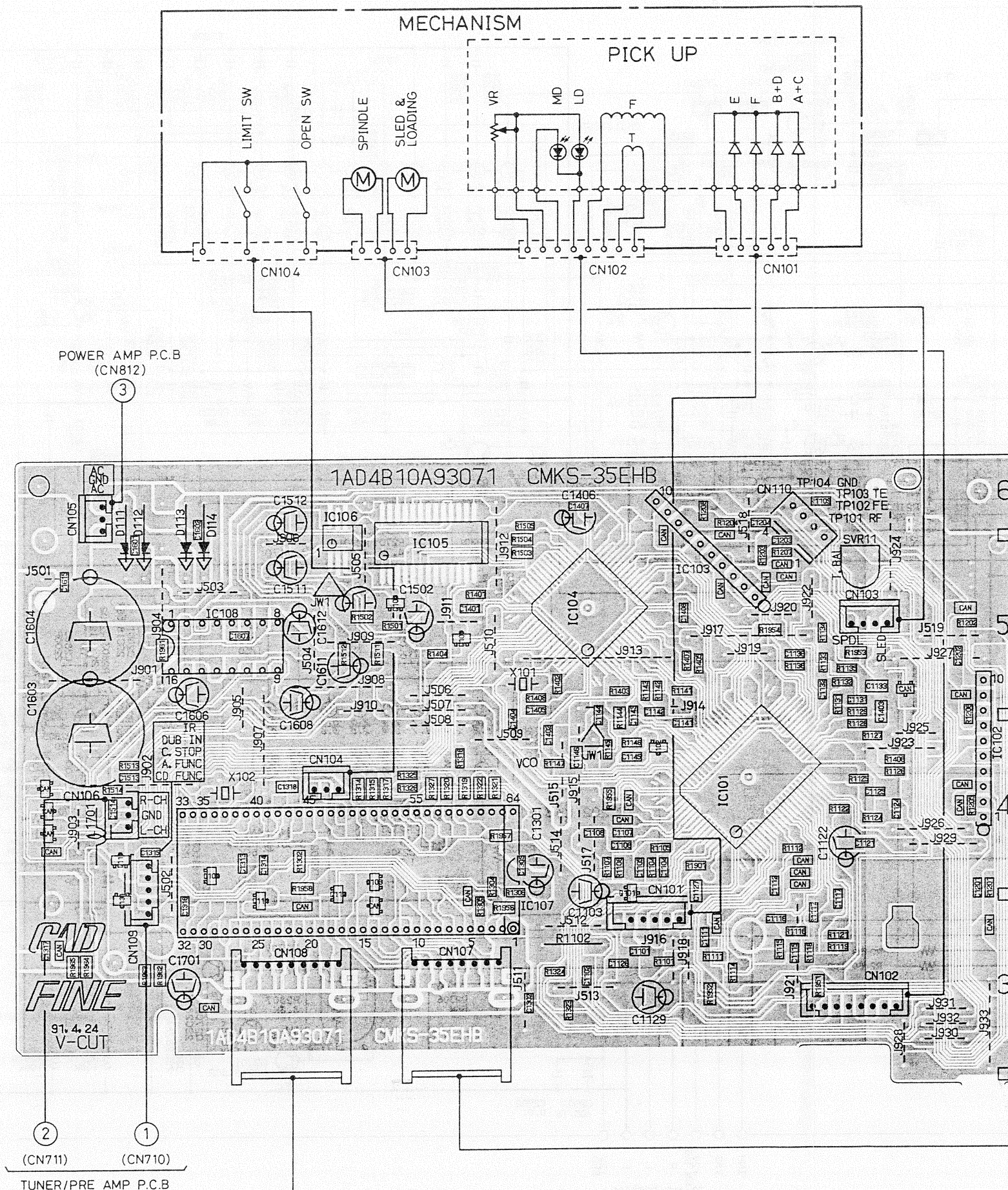
VOLTAGES OF TRANSISTOR (CD) (Unit : Volt)

TRANSISTOR												
Transistor No.	Q101			Q102			Q103			Q105		
Measuring Pin Name	E	C	B	E	C	B	E	C	B	E	C	B
Stop Mode	4.97	0	4.82	2.54	2.60	2.51	0	5.0	0	4.02	5.0	4.6
Play Mode	4.0	1.0	4.0	Fluc	Fluc	Fluc	0	5.0	0	4.02	5.0	4.6
Transistor No.	Q111			Q112			Q118					
Measuring Pin Name	E	C	B	E	C	B	E	C	B			
Stop Mode	5.0	0	5.0	Fluc	5.0	0	0	0	0			
Play Mode	5.0	5.0	0	Fluc	5.0	0	0	0	0			

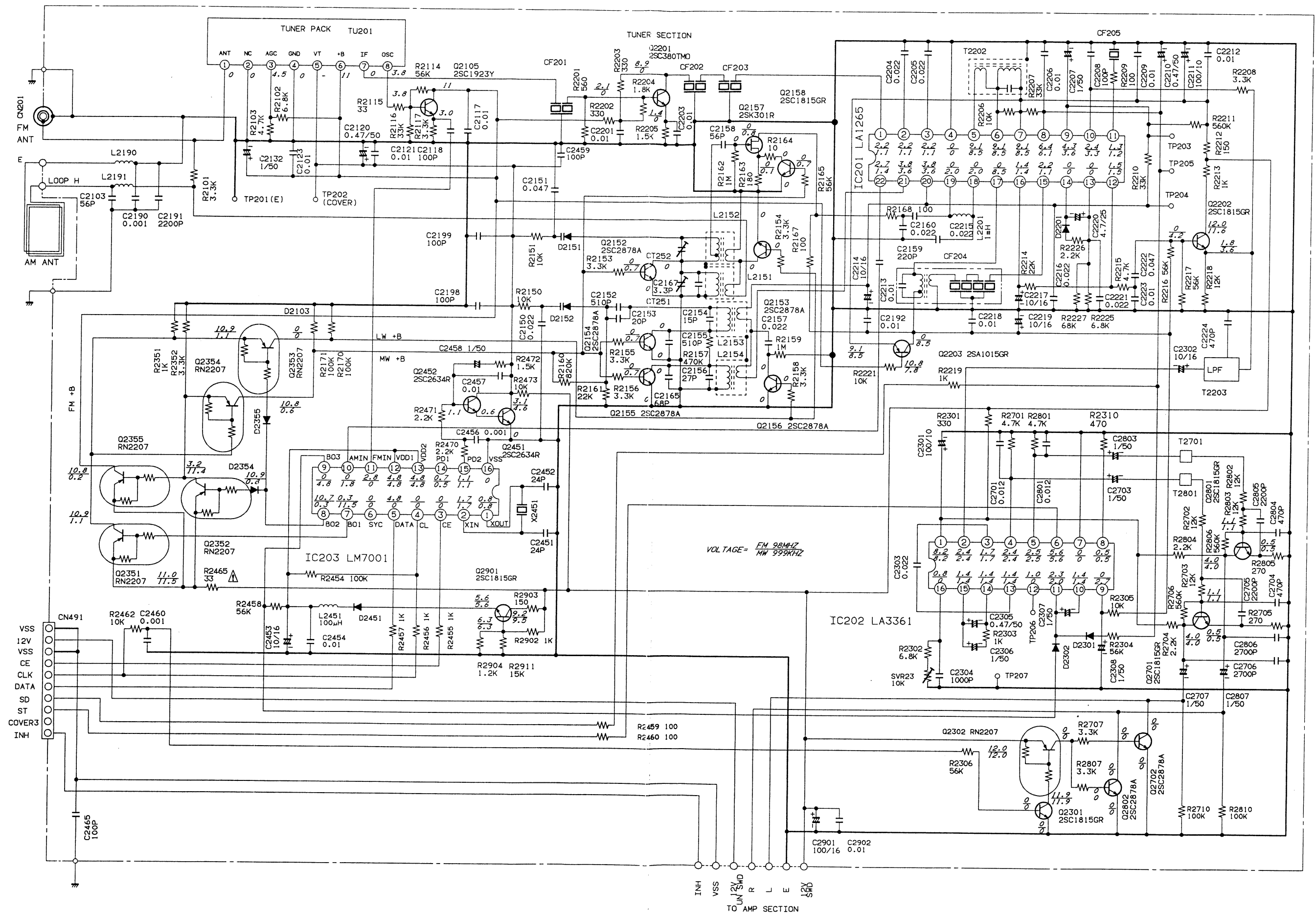
SCHEMATIC DIAGRAM (TAPE MECHANISM)



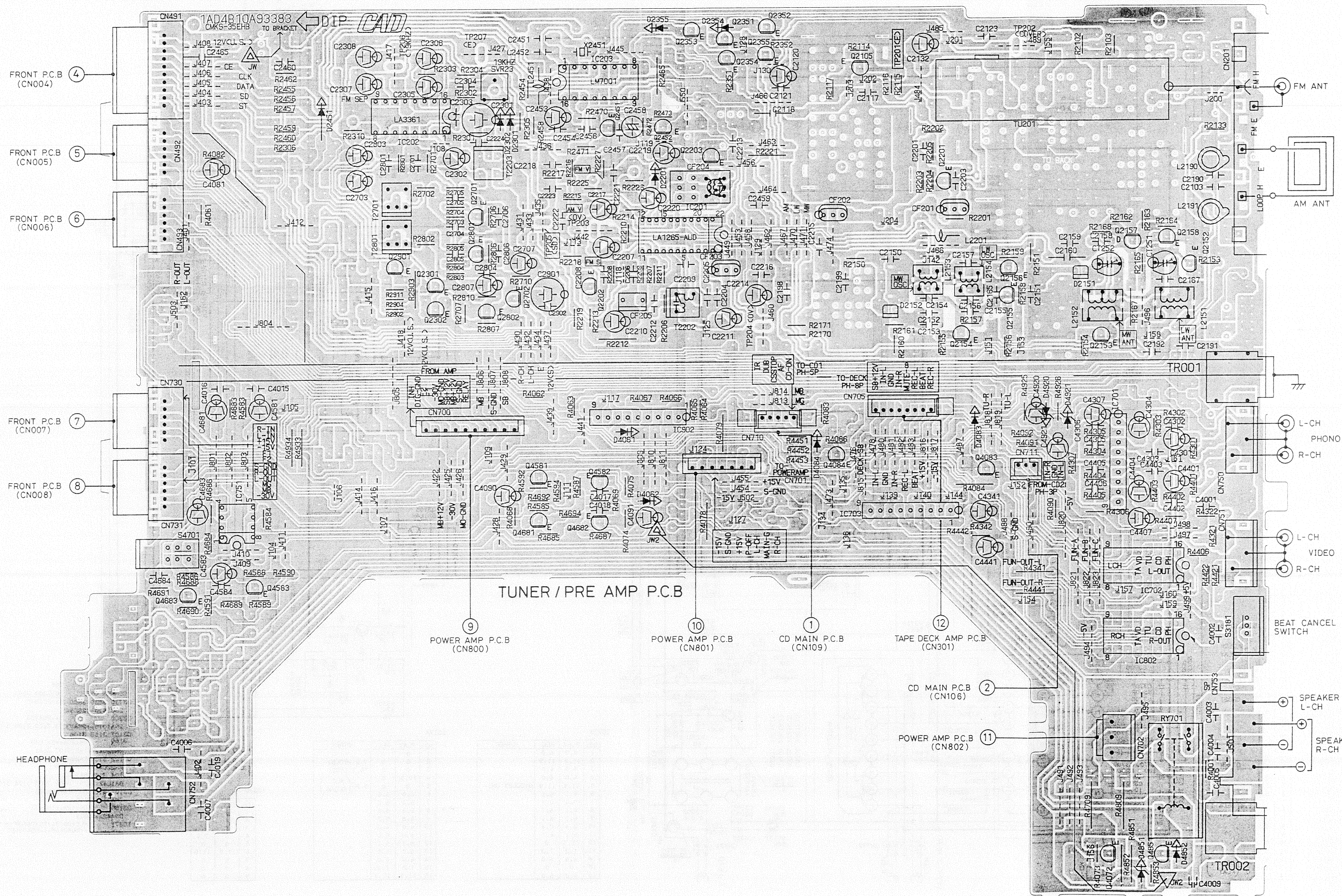




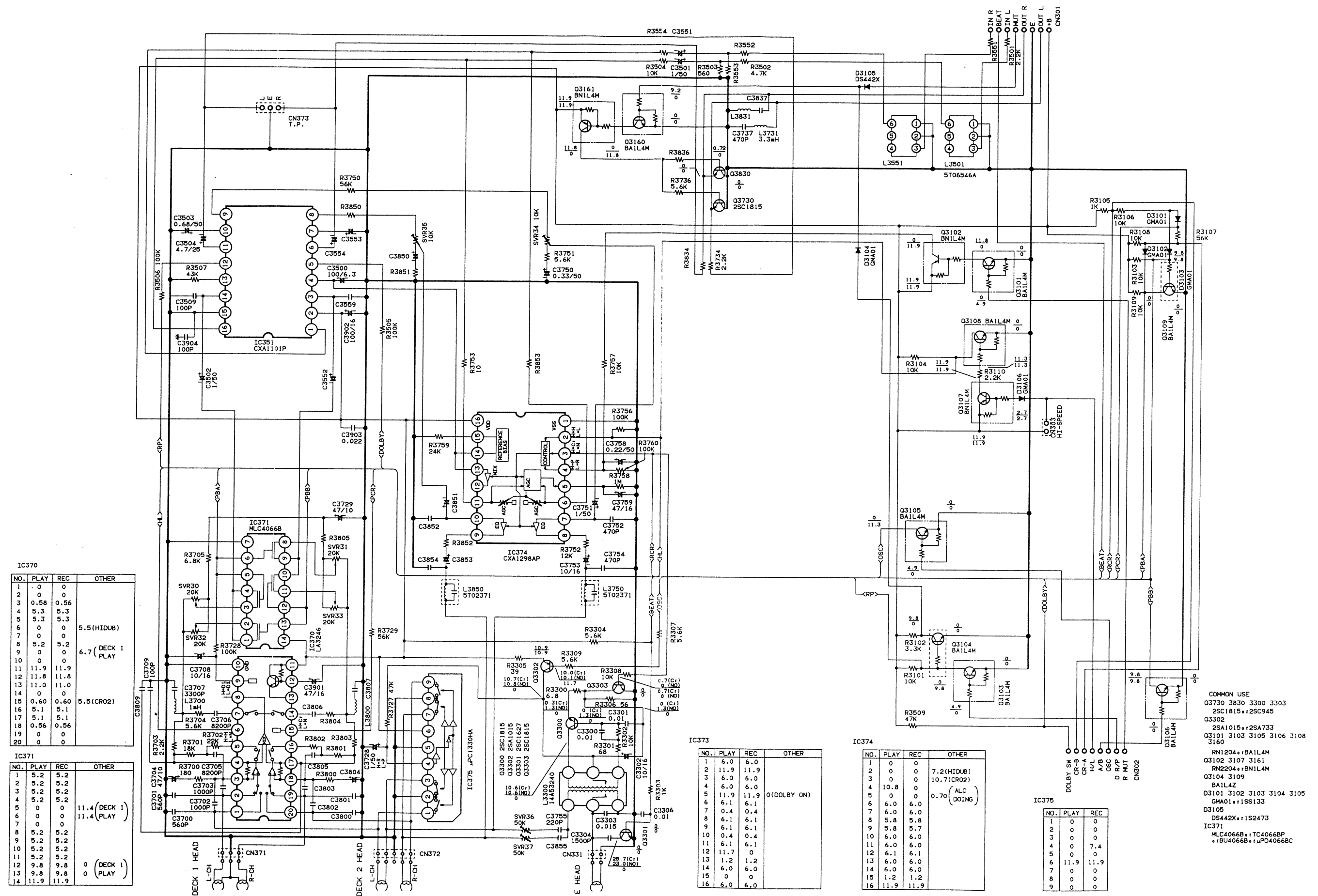
SCHEMATIC DIAGRAM (TUNER)



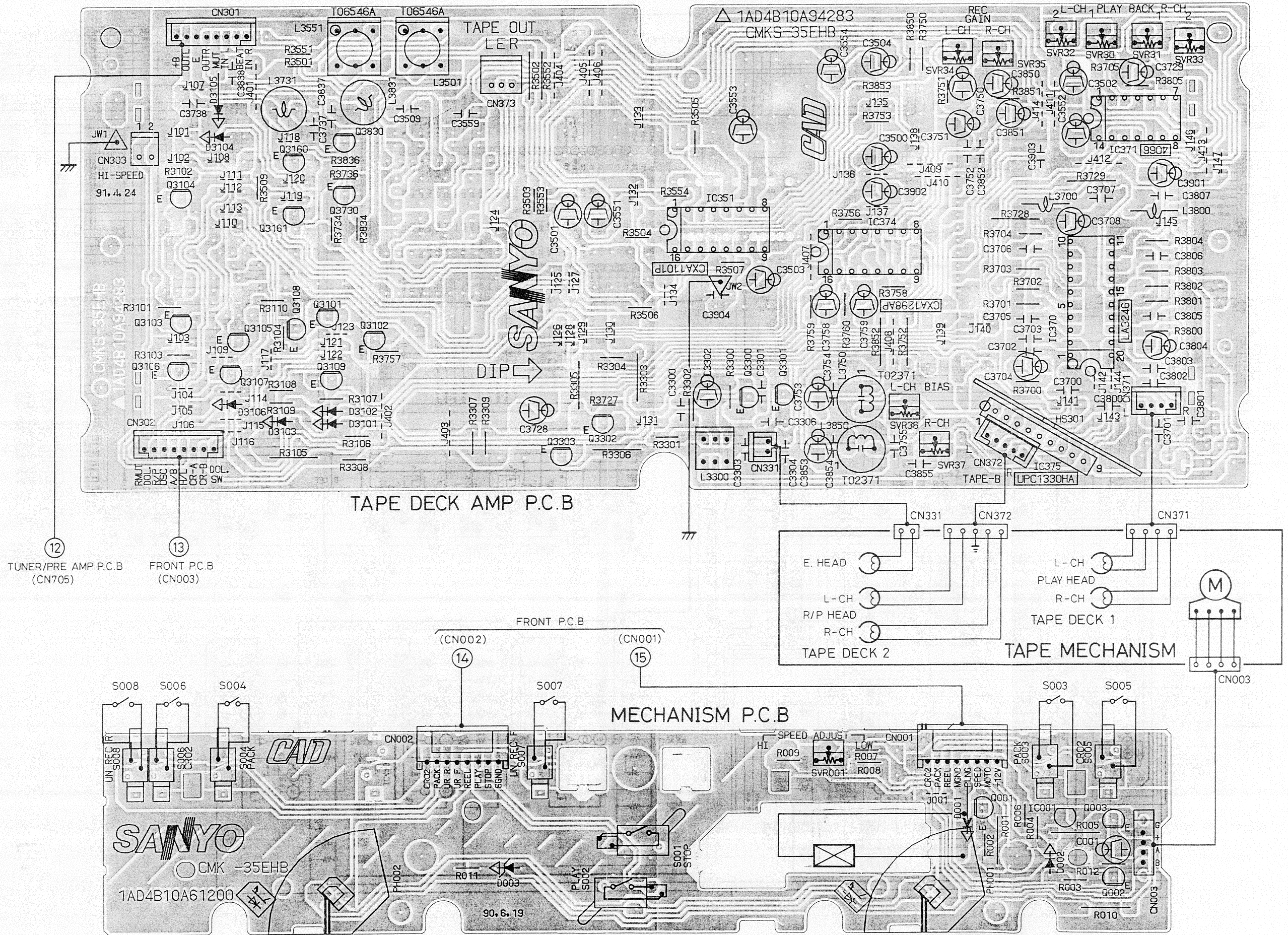
WIRING DIAGRAM (TUNER & PRE-AMPLIFIER)



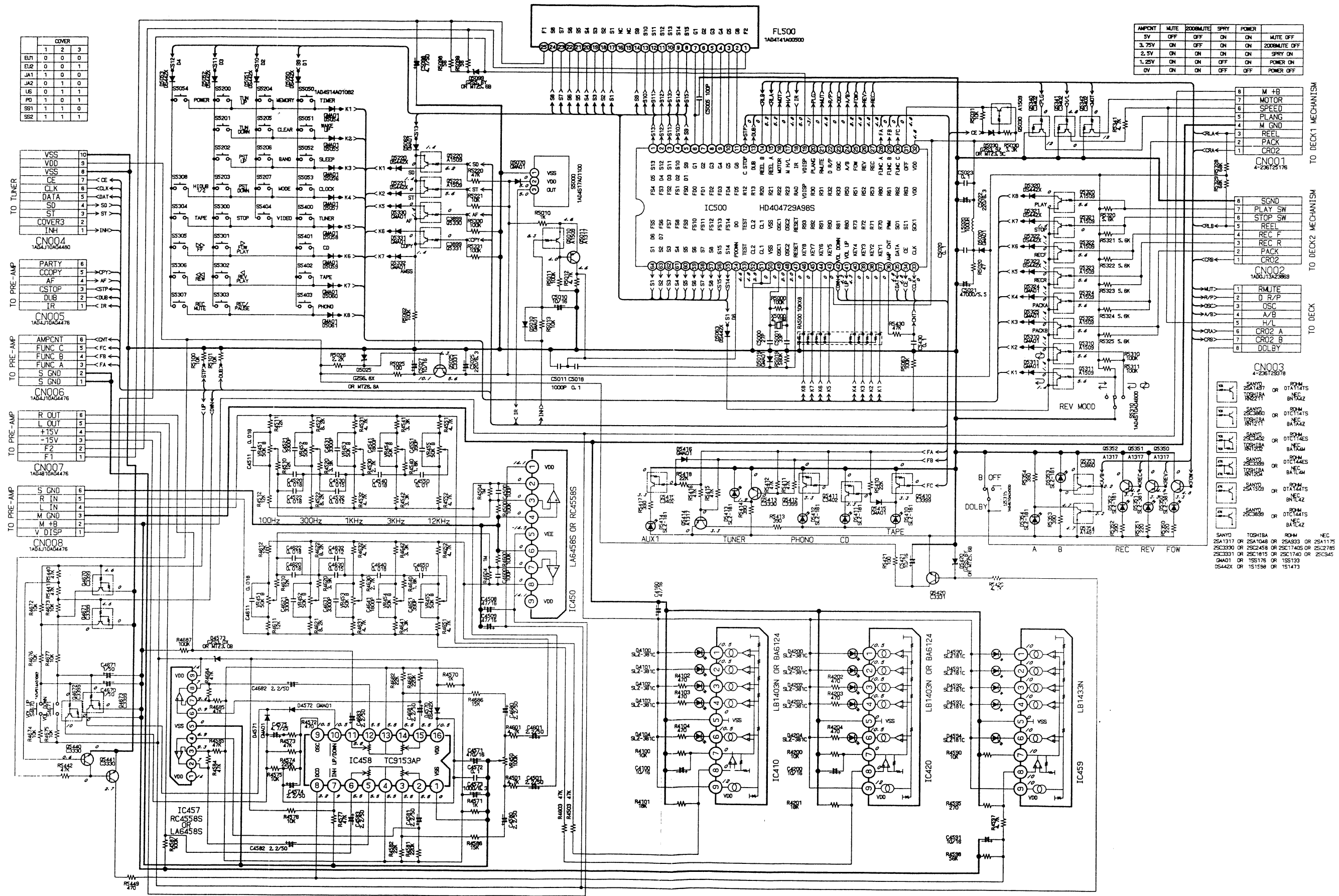
SCHEMATIC DIAGRAM (TAPE DECK AMPLIFIER)



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466
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SCHEMATIC DIAGRAM (FRONT)



WIRING DIAGRAM (FRONT)-

FRONT P.C.B

